zenith

SERVICE MANUAL

Product Type: DVD+VCR
Chassis: D35 (DECK), DP-7C(MD)
Manual Series: XBV323
Manual Part #: 3829RVN006P
Model Line: F
Product Year: 2003

Model Series:

XBV323

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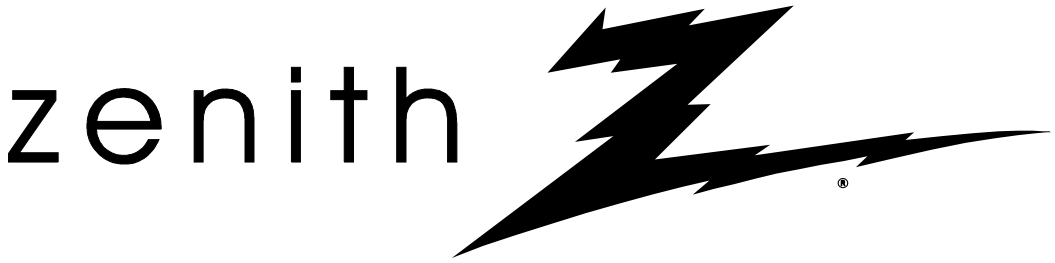
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SECTION 1

SUMMARY

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PRODUCT SAFETY SERVICING GUIDELINES FOR VIDEO PRODUCTS

IMPORTANT SAFETY NOTICE

This manual was prepared for use only by properly trained audio-video service technicians.

When servicing this product, under no circumstances should the original design be modified or altered without permission from Zenith Electronics Corporation. All components should be replaced only with types identical to those in the original circuit and their physical location, wiring and lead dress must conform to original layout upon completion of repairs.

Special components are also used to prevent x-radiation, shock and fire hazard. These components are indicated by the letter "x" included in their component designators and are required to maintain safe performance. No deviations are allowed without prior approval by Zenith Electronics Corporation.

Circuit diagrams may occasionally differ from the actual circuit used. This way, implementation of the latest safety and performance improvement changes into the set is not delayed until the new service literature is printed.

CAUTION: Do not attempt to modify this product in any way. Never perform customized installations without manufacturer's approval. Unauthorized modifications will not only void the warranty, but may lead to property damage or user injury.

Service work should be performed only after you are thoroughly familiar with these safety checks and servicing guidelines.

GRAPHIC SYMBOLS

The exclamation point within an equilateral triangle is intended to alert the service personnel to important safety information in the service literature.

The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the service personnel to the presence of noninsulated "dangerous voltage" that may be of sufficient magnitude to constitute a risk of electric shock.

The pictorial representation of a fuse and its rating within an equilateral triangle is intended to convey to the service personnel the following fuse replacement caution notice:

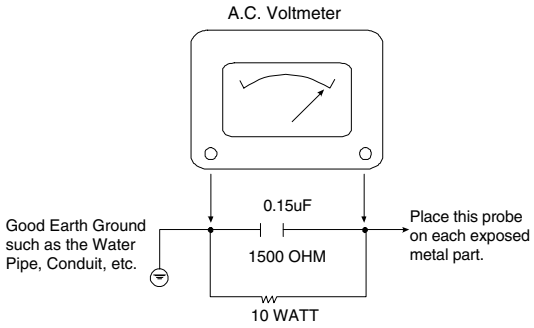
CAUTION: FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ALL FUSES WITH THE SAME TYPE AND RATING AS MARKED NEAR EACH FUSE.

SERVICE INFORMATION

While servicing, use an isolation transformer for protection from AC line shock. After the original service problem has been corrected, make a check of the following:

FIRE AND SHOCK HAZARD

1. Be sure that all components are positioned to avoid a possibility of adjacent component shorts. This is especially important on items trans-ported to and from the repair shop.
2. Verify that all protective devices such as insulators, barriers, covers, shields, strain reliefs, power supply cords, and other hardware have been reinstalled per the original design. Be sure that the safety purpose of the polarized line plug has not been defeated.
3. Soldering must be inspected to discover possible cold solder joints, solder splashes, or sharp solder points. Be certain to remove all loose foreign particles.
4. Check for physical evidence of damage or deterioration to parts and components, for frayed leads or damaged insulation (including the AC cord), and replace if necessary.
5. No lead or component should touch a high current device or a resistor rated at 1 watt or more. Lead tension around protruding metal surfaces must be avoided.
6. After reassembly of the set, always perform an AC leakage test on all exposed metallic parts of the cabinet (the channel selector knobs, antenna terminals, handle and screws) to be sure that set is safe to operate without danger of electrical shock. DO NOT USE A LINE ISOLATION TRANSFORMER DURING THIS TEST. Use an AC voltmeter having 5000 ohms per volt or more sensitivity in the following manner: Connect a 1500 ohm, 10 watt resistor, paralleled by a .15 mfd 150V AC type capacitor between a known good earth ground water pipe, conduit, etc.) and the exposed metallic parts, one at a time. Measure the AC voltage across the combination of 1500 ohm resistor and .15 mfd capacitor. Reverse the AC plug by using a non-polarized adaptor and repeat AC voltage measurements for each exposed metallic part. Voltage measured must not exceed 0.75 volts RMS. This corresponds to 0.5 milliamp AC. Any value exceeding this limit constitutes a potential shock hazard and must be corrected immediately.



TIPS ON PROPER INSTALLATION

1. Never install any receiver in a closed-in recess, cubbyhole, or closely fitting shelf space over, or close to, a heat duct, or in the path of heated air flow.
2. Avoid conditions of high humidity such as: outdoor patio installations where dew is a factor, near steam radiators where steam leakage is a factor, etc.
3. Avoid placement where draperies may obstruct venting. The customer should also avoid the use of decorative scarves or other coverings that might obstruct ventilation.
4. Wall- and shelf-mounted installations using a commercial mounting kit must follow the factory-approved mounting instructions. A product mounted to a shelf or platform must retain its original feet (or the equivalent thickness in spacers) to provide adequate air flow across the bottom. Bolts or screws used for fasteners must not touch any parts or wiring. Perform leakage tests on customized installations.
5. Caution customers against mounting a product on a sloping shelf or in a tilted position, unless the receiver is properly secured.
6. A product on a roll-about cart should be stable in its mounting to the cart. Caution the customer on the hazards of trying to roll a cart with small casters across thresholds or deep pile carpets.
7. Caution customers against using extension cords. Explain that a forest of extensions, sprouting from a single outlet, can lead to disastrous consequences to home and family.

SERVICING PRECAUTIONS

CAUTION: Before servicing the DVD+VCR covered by this service data and its supplements and addends, read and follow the *SAFETY PRECAUTIONS. NOTE:* if unforeseen circumstances create conflict between the following servicing precautions and any of the safety precautions in this publications, always follow the safety precautions.
Remember Safety First:

General Servicing Precautions

1. Always unplug the DVD+VCR AC power cord from the AC power source before:
   (1) Removing or reinstalling any component, circuit board, module, or any other assembly.
   (2) Disconnecting or reconnecting any internal electrical plug or other electrical connection.
   (3) Connecting a test substitute in parallel with an electrolytic capacitor.
   Caution: A wrong part substitution or incorrect polarity installation of electrolytic capacitors may result in an explosion hazard.

2. Do not spray chemicals on or near this DVD+VCR or any of its assemblies.

3. Unless specified otherwise in this service data, clean electrical contacts by applying an appropriate contact cleaning solution to the contacts with a pipe cleaner, cotton-tipped swab, or comparable soft applicator.
   Unless specified otherwise in this service data, lubrication of contacts is not required.

4. Do not defeat any plug/socket B+ voltage interlocks with whitch instruments covered by this service manual might be equipped.

5. Do not apply AC power to this DVD+VCR and / or any of its electrical assemblies unless all solid-state device heat sinks are correctly installed.

6. Always connect the test instrument ground lead to an appropriate ground before connecting the test instrument positive lead. Always remove the test instrument ground lead last.

Insulation Checking Procedure

Disconnect the attachment plug from the AC outlet and turn the power on. Connect an insulation resistance meter (500V) to the blades of the attachment plug. The insulation resistance between each blade of the attachment plug and accessible conductive parts (Note 1) should be more than 1M-ohm.
Note 1: Accessible Conductive Parts include Metal panels, Input terminals, Earphone jacks,etc.

Electrostatically Sensitive (ES) Devices

Some semiconductor (solid state) devices can be damaged easily by static electricity. Such components commonly are called Electrostatically Sensitive (ES) Devices. Examples of typical ES devices are integrated circuits and some field effect transistors and semiconductor chip components.
The following techniques should be used to help reduce the incidence of component damage caused by static electricity.

1. Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any electrostatic charge on your body by touching a known earth ground. Alternatively, obtain and wear a commercially available discharging wrist strap device, which should be removed for potential shock reasons prior to applying power to the unit under test.

2. After removing an electrical assembly equipped with ES devices, place the assembly on a conductive surface such as aluminum foil, to prevent electrostatic charge buildup or exposure of the assembly.

3. Use only a grounded-tip soldering iron to solder or unsolder ES devices.

4. Use only an anti-static solder removal device. Some solder removal devices not classified as “anti-static” can generate electrical charges sufficient to damage ES devices.

5. Do not use freon-propelled chemicals. These can generate an electrical charge sufficient to damage ES devices.

6. Do not remove a replacement ES device from its protective package until immediately before you are ready to install it. (Most replacement ES devices are packaged with leads electrically shorted together by conductive foam, aluminum foil,or comparable conductive material).

7. Immediately before removing the protective material from the leads of a replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.

   Caution: Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.

8. Minimize bodily motions when handling unpackaged replacement ES devices. (Normally harmless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity sufficient to damage an ES device.)

SPECIFICATIONS

General

Power requirements	AC 120V ,60 Hz
Power consumption	23W
Dimensions (approx.)	430 X 97.5 X 293 mm (16.9 x 3.9 x 11.5 inches)(w x h x d)
Mass (approx.)	4.8 kg (10.58 lbs)
Operating temperature	5 °C to 40 °C (41 °F to 104 °F)
Operating humidity	5 % to 90 %
Signal system	NTSC

Inputs

ANTENNA IN	Antenna or CATV input,75 ohms
VHS VIDEO IN	1 Vp-p 75 ohms,sync negative,RCA jack x 1
VHS AUDIO IN	-6.0 dBm more than 47 ohms,RCA jack (L,R)x 1

Outputs

VIDEO OUT	1 Vp-p 75 ohms,sync negative
S-VIDEO OUT	(Y)1.0 V (p-p),75 ohms,negative sync,Mini DIN 4-pin x 1 (C)0.3 V (p-p)75 ohms
COMPONENT VIDEO OUT	(Y)1.0 V (p-p),75 ohms,negative sync,RCA jack x 1 (Pb)/(Pr)0.7 V (p-p),75 ohms,RCA jack x 2
Audio output (digital audio)	0.5 V (p-p),75 ohms,RCA jack x 1
Audio output (analog audio)	2.0 Vrms (1 KHz,0 dB),330 ohms,RCA jack (L,R)x 1
RF OUT Channel	3 or 4

VCR Specifications

Head system	Four head helical scan azimuth system
TTimer	12-hour display type with AM,PM
Tape speed	SP:33.35 mm/sec,LP:16.67 mm/sec,SLP:11.12 mm/sec
Tape width	12.7 mm
Maximum recording time	SP:2 HOURS (T-120),SLP:6 HOURS (T-120)/8 HOURS (T-160)
Rewind time	About 3 minutes (T-120)
Antenna	75 ohms (VHF/UHF)
VHF output signal	Channel 3 or 4 (Switchable)
Channel coverage	VHF:2-13,UHF:14-69,CATV:1-125 (4A,A-W,W+1 -W+84,A-5 -A-1)
Frequency range	20Hz to 20kHz
Signal-to-noise ratio	More than 43dB
Dynamic range	More than 88 dB
Channel separation	More than 60 dB

DVD Specifications

Laser system	Semiconductor laser,wavelength 650 nm
Frequency response	DVD (PCM 96 kHz):8 Hz to 44 kHz, DVD (PCM 48 kHz):8 Hz to 22 kHz CD:8 Hz to 20 kHz
Signal-to-noise ratio	More than 100dB (ANALOG OUT jacks only)
Harmonic distortion	Less than 0.008%
Dynamic range	More than 95 dB (DVD/CD)

Accessories:

Video cable x 1,Audio cable x 1,RF 75-ohm Coaxial Cable x 1,Remote control x 1,Batteries x 2

• Design and specifications are subject to change without prior notice.

FRONT VIEW (XBV323)

SECTION 2

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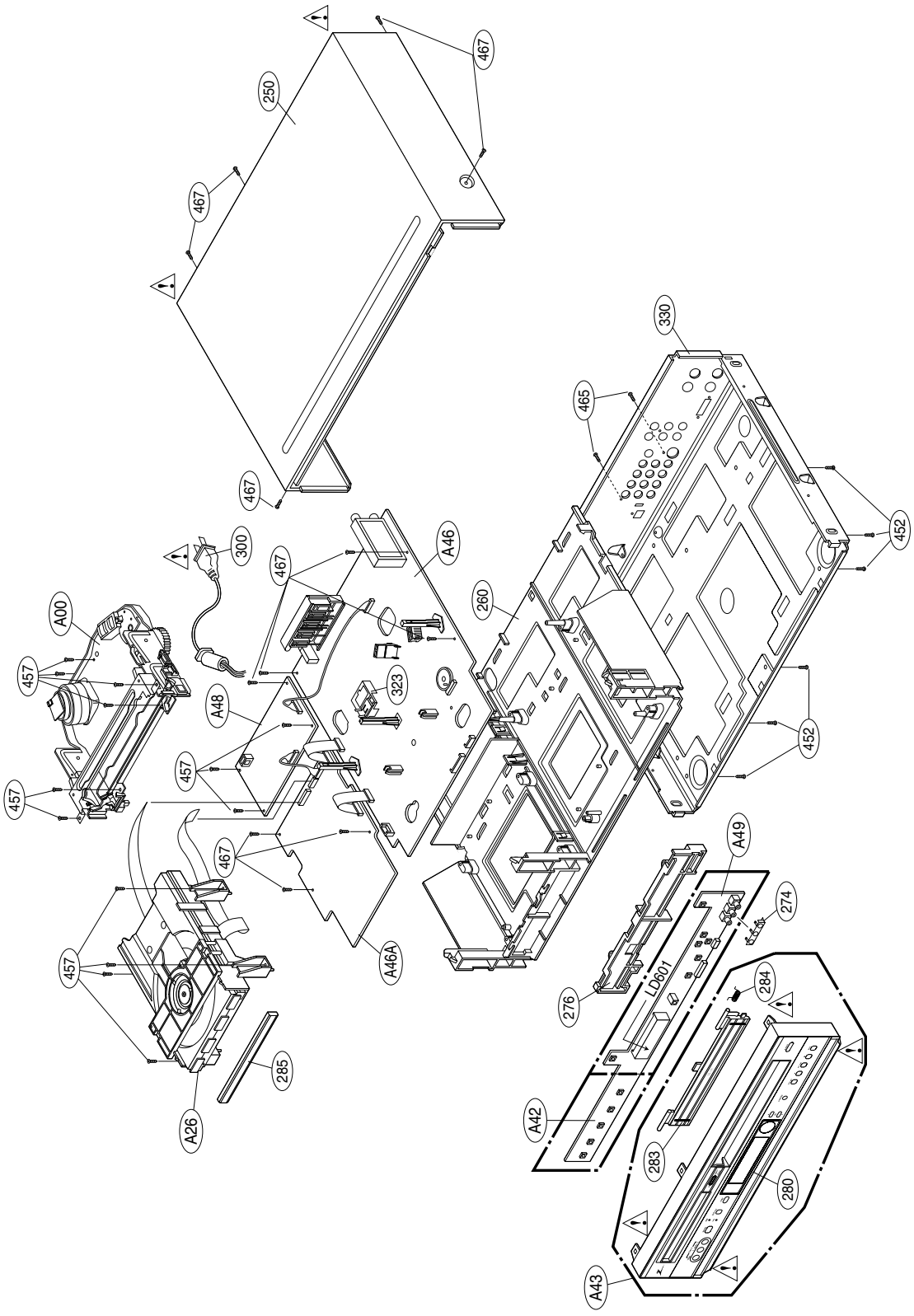
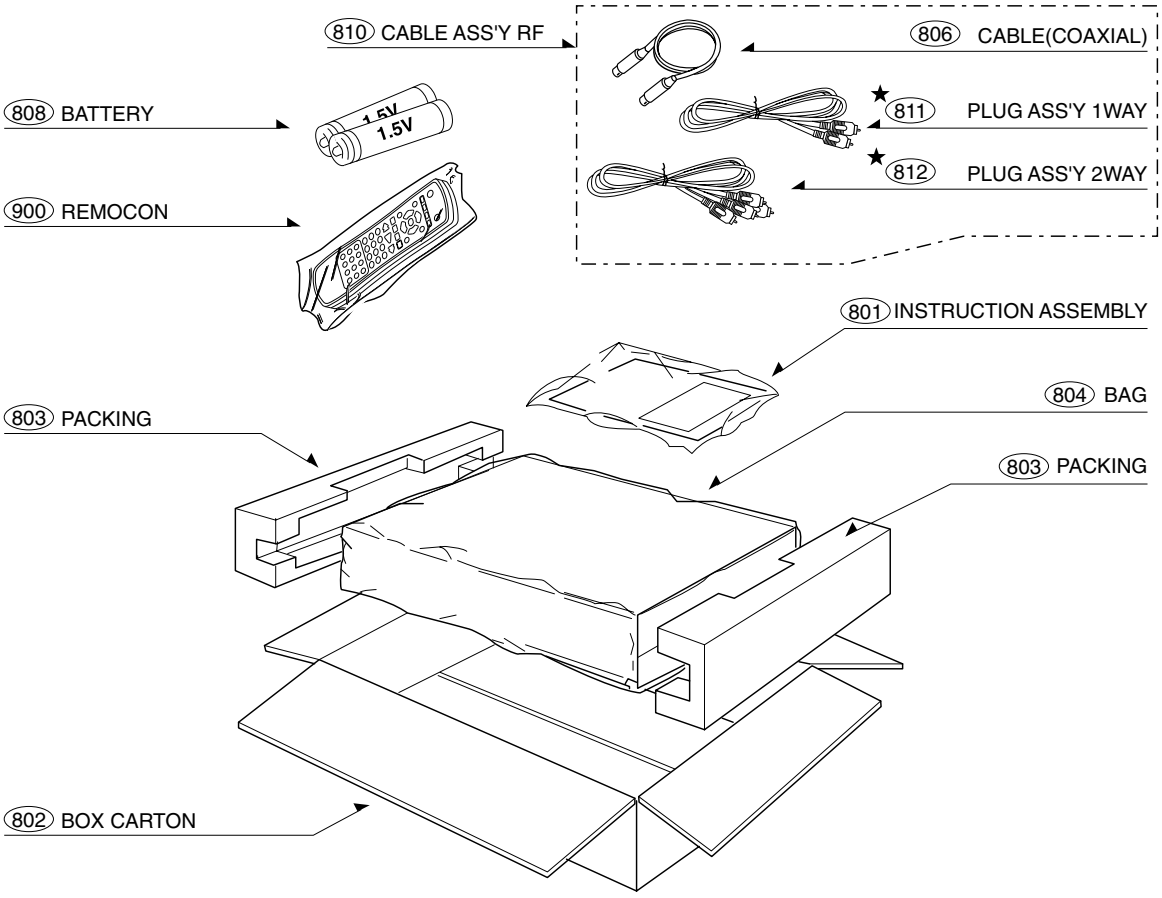
EXPLODED VIEWS

1. Cabinet and Main Frame Section



2. Packing Accessory Section

★OPTIONAL PARTS



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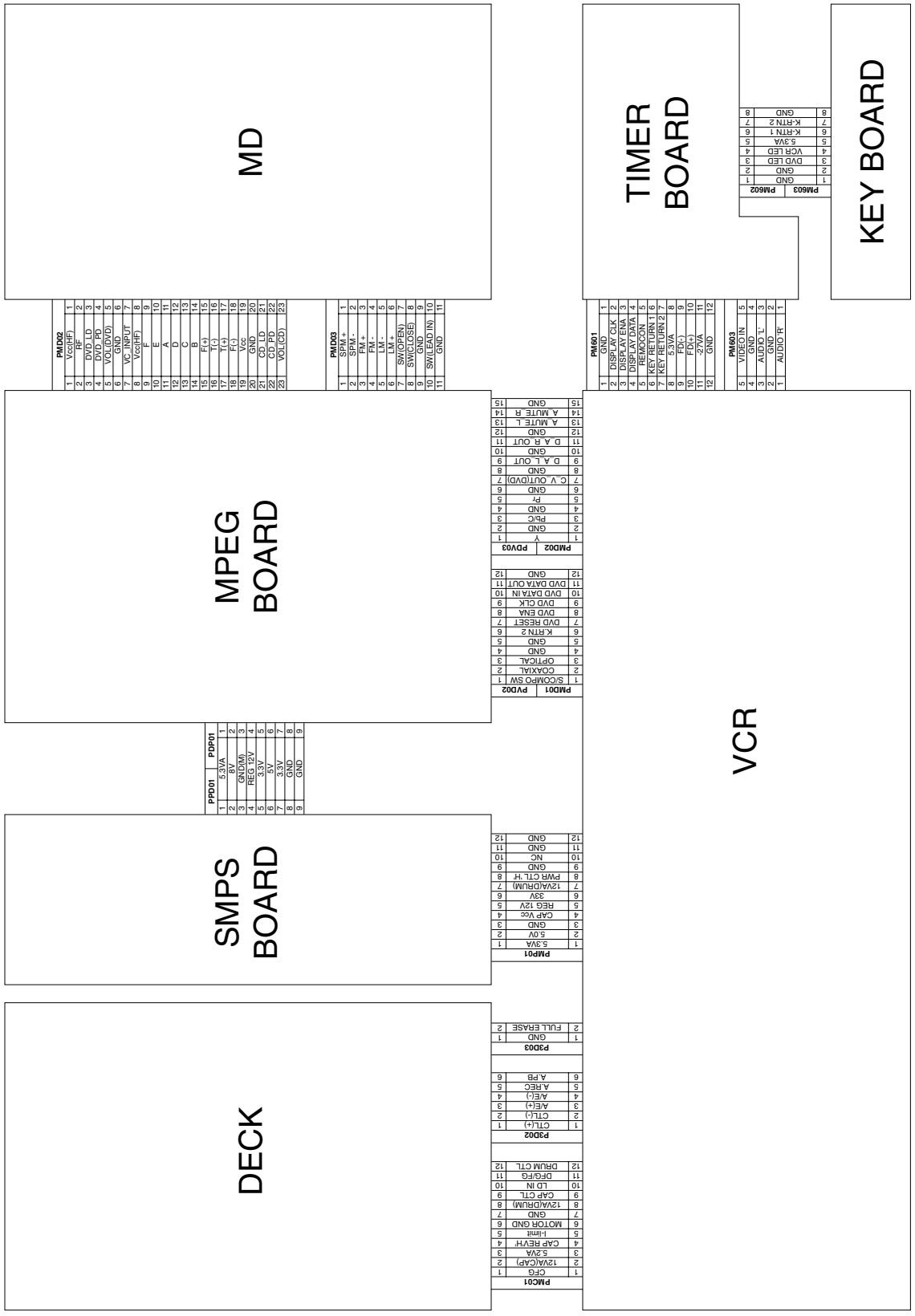
OVERALL WIRING DIAGRAM



VCR PART
ELECTRICAL ADJUSTMENT PROCEDURES

1. Servo Adjustment

1) PG Adjustment

• Test Equipment
a) OSCILLOSCOPE
b) NTSC MODEL : NTSC SP TEST TAPE

• Adjustment And Specification

MODE	MEASUREMENT POINT	ADJUSTMENT POINT	SPECIFICATION
PLAY	V.Out H/SW(W861, W862)	R/C TRK JIG KEY	6.5 ± 0.5H

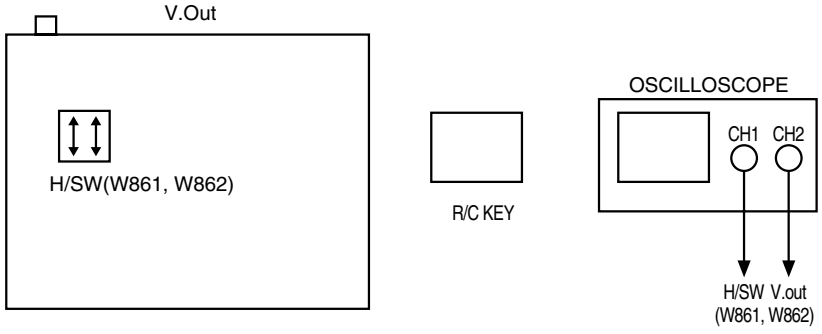
• Adjustment Procedure

a) Insert the SP Test Tape and play.
b) Connect the CH1 of the oscilloscope to the H/SW(W861, W862) and CH2 to the Video Out for the VCR.
c) Trigger the mixed Combo Video Signal of CH2 to the CH1 H/SW(W861, W862), and then check the distance (time difference), which is from the selected A(B) Head point of the H/SW(W861, W862) signal to the starting point of the vertical synchronized signal, to 6.5H ± 0.5H (412μs, 1H=63μs).
Note - Adjust the distance of X, pressing the Tracking(+) or Tracking(-) when the “ATR” is blinking after the SP Test Tape is inserted.

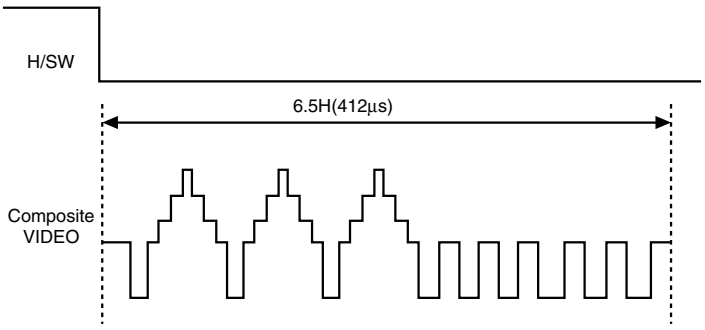
• PG Adjustment Method

a-1) Playback the SP standard tape
b-2) Press the “OK(ENTER)” key on the Remote controller and the “REC” key on the Front Panel at the same time, then the unit will go in to Tracking initial mode.
c-3) Repeat the above step(No.b-2), then the unit finishes the PG adjusting automatically.
d-4) Stop the playback, then the unit goes out of PG adjusting mode after saving the PG data.

• CONNECTION



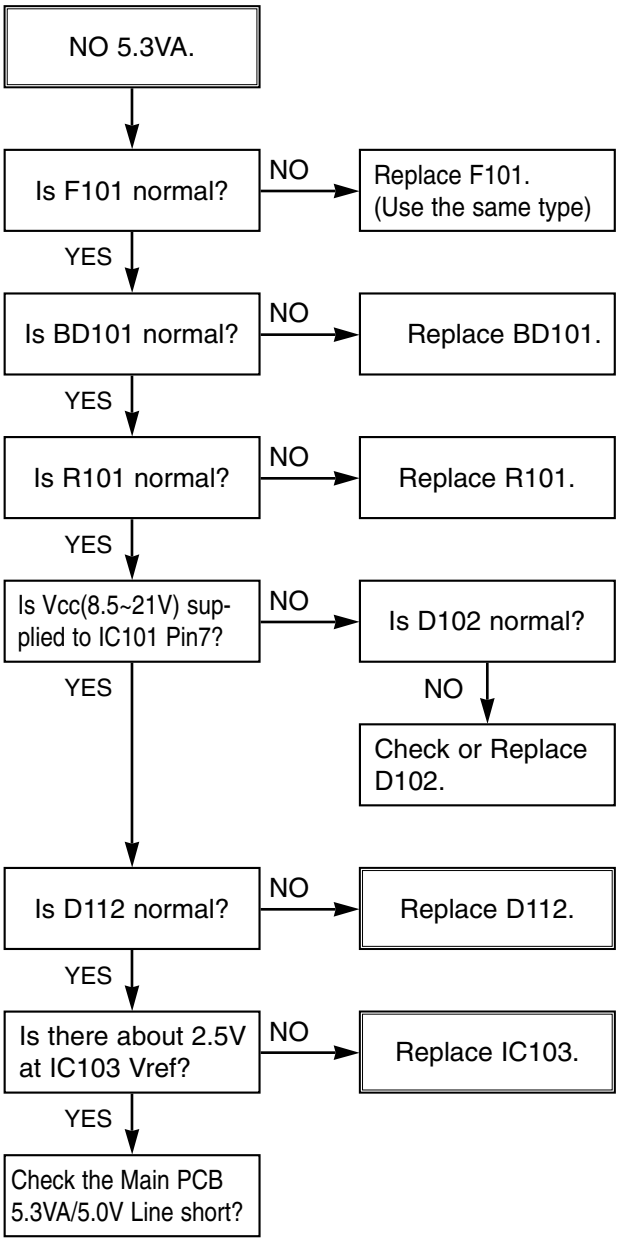
• WAVEFORM



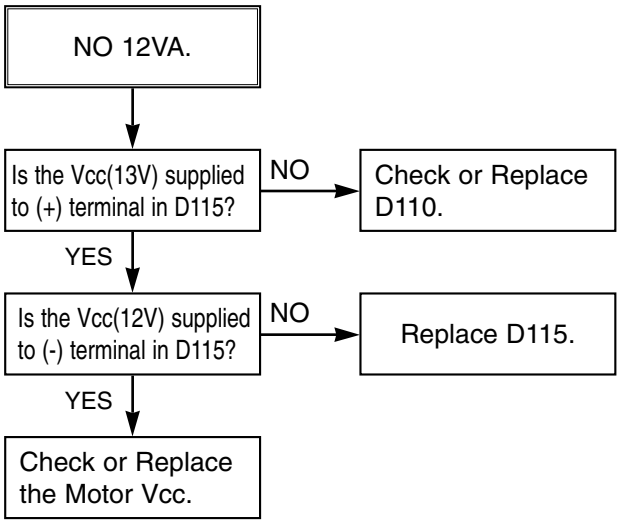
VCR ELECTRICAL TROUBLESHOOTING GUIDE

1. Power(SMPS) CIRCUIT

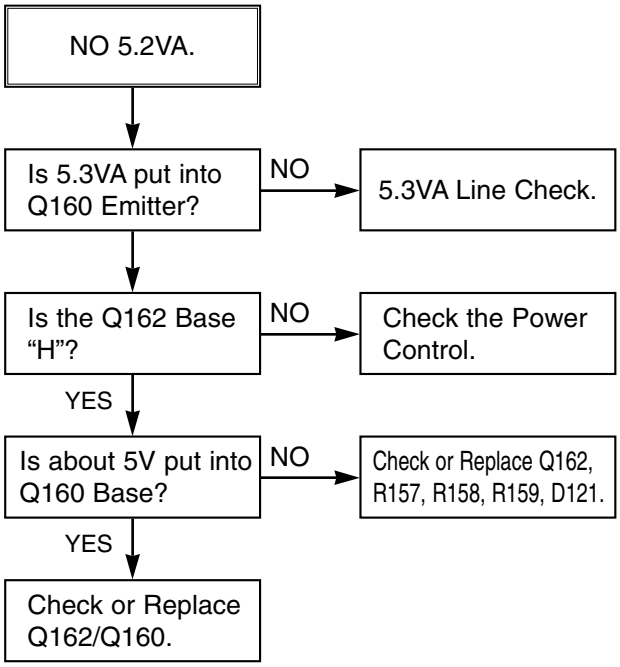
(1) No 5.3VA (SYS/Hi-Fi/TUNER)



(2) No 12VA (TO CAP, DRUM MOTOR)

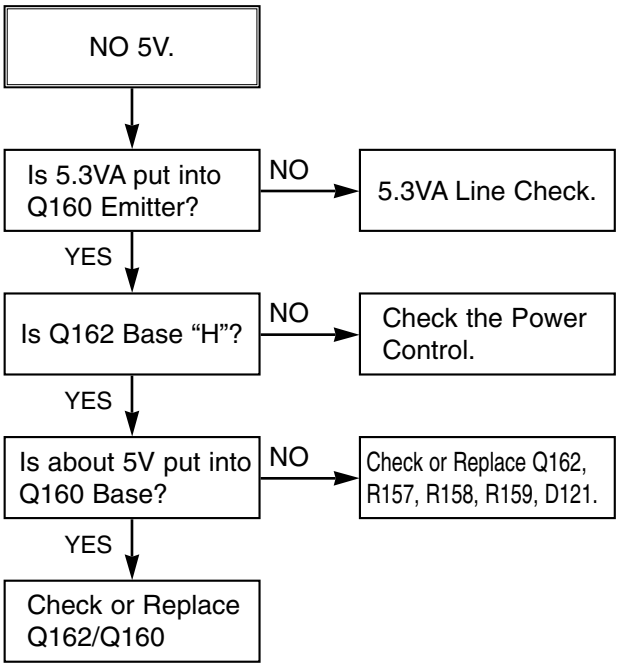


(3) No 5.2V (SYS/Hi-Fi/TUNER)

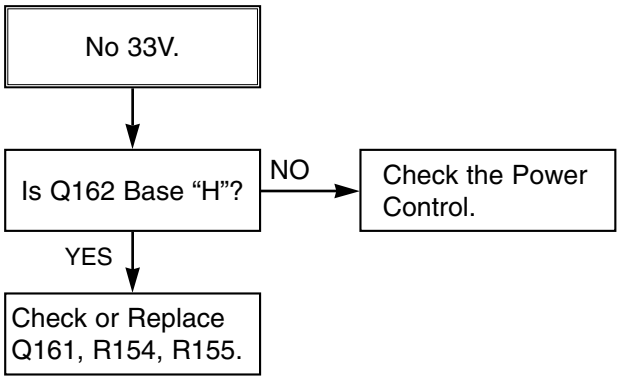


VCR ELECTRICAL TROUBLESHOOTING GUIDE

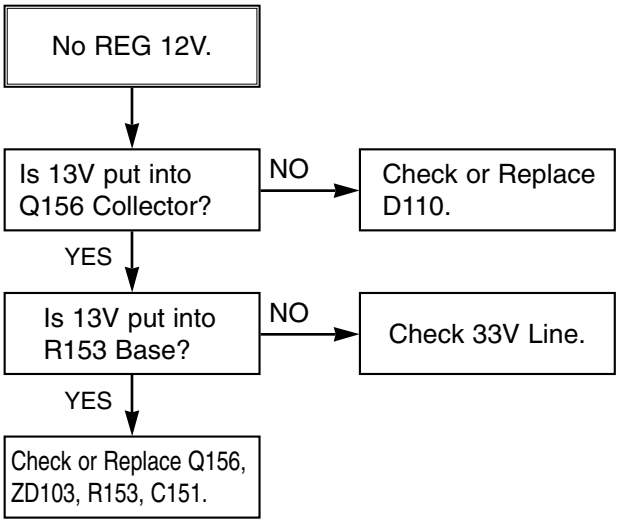
(4) No 5V (TO DVD)



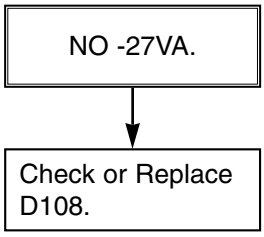
(5) No 33V (TUNER)



(6) No REG 12V

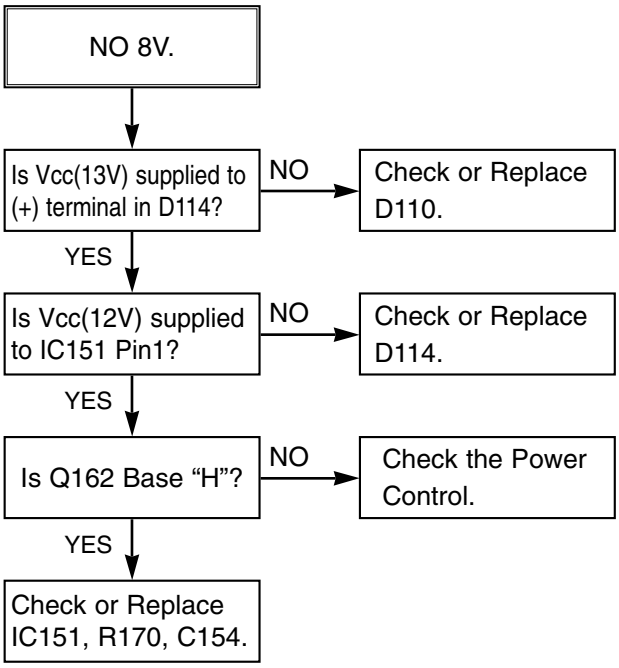


(7) No -27VA

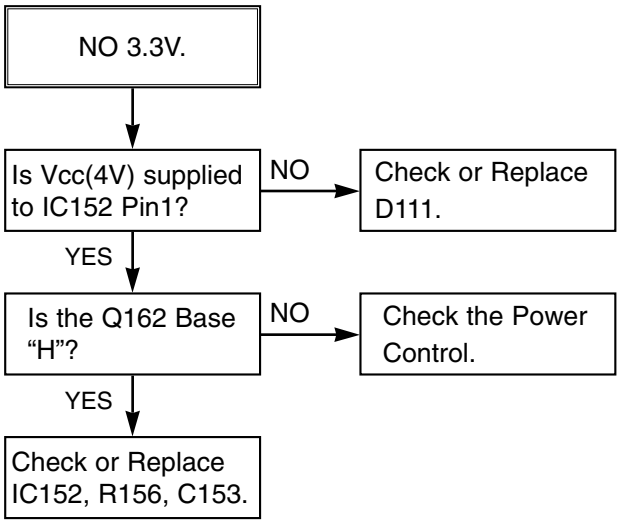


VCR ELECTRICAL TROUBLESHOOTING GUIDE

(8) No 8V(TO DVD)



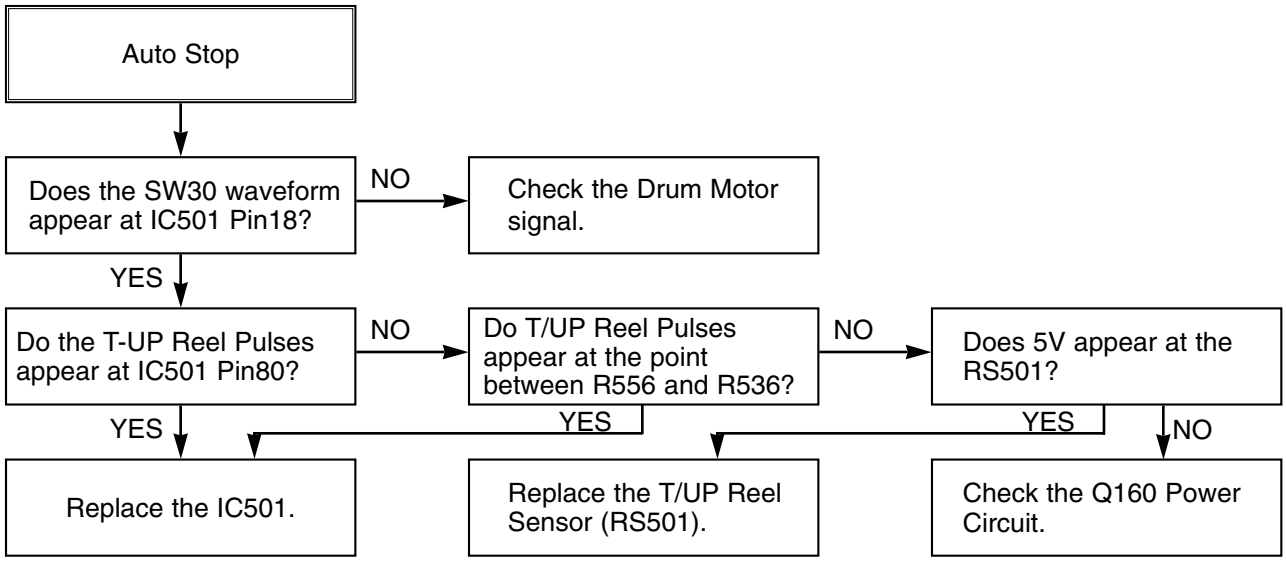
(9) No 3.3V(TO DVD)



VCR ELECTRICAL TROUBLESHOOTING GUIDE

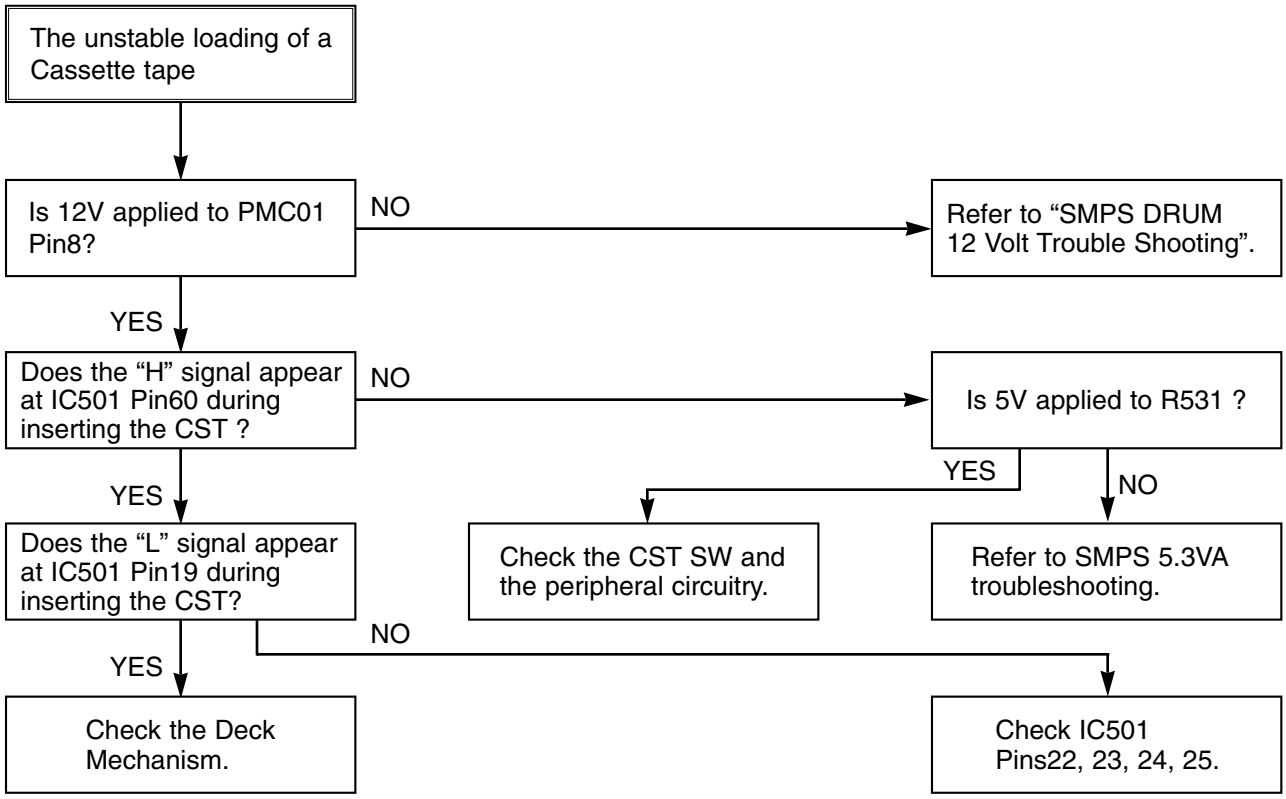
2. SYSTEM/KEY CIRCUIT

(1) AUTO STOP



Note : Auto stop can occur because Grease or Oil has dried up

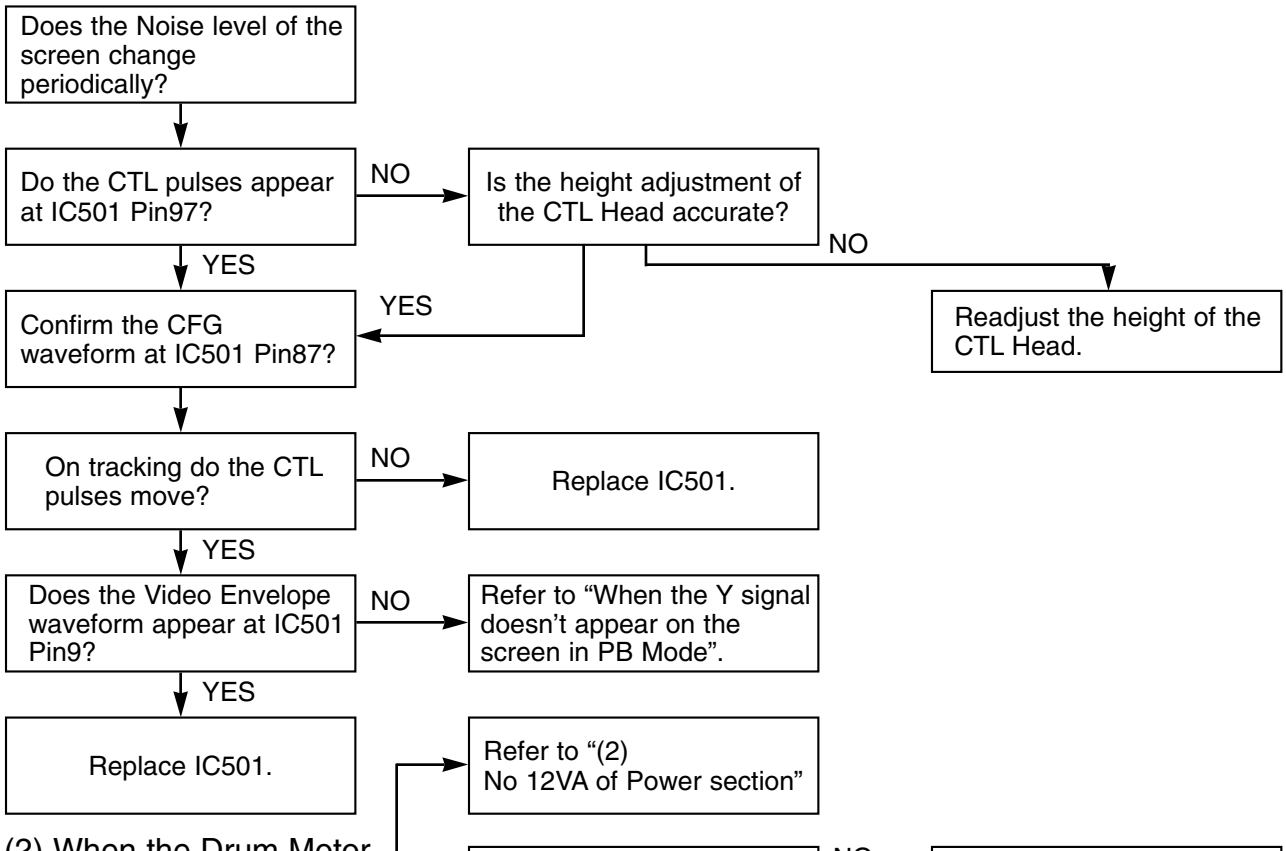
(2) The unstable loading of a Cassette tape


The unstable loading of a Cassette tape
Is 12V applied to PMC01 Pin8?
NO
Refer to “SMPS DRUM 12 Volt Trouble Shooting”.
YES
Does the “H” signal appear at IC501 Pin60 during inserting the CST ?
NO
Is 5V applied to R531 ?
YES
YES
NO
Does the “L” signal appear at IC501 Pin19 during inserting the CST?
Check the CST SW and the peripheral circuitry.
Refer to SMPS 5.3VA troubleshooting.
NO
YES
Check the Deck Mechanism.
Check IC501 Pins22, 23, 24, 25.

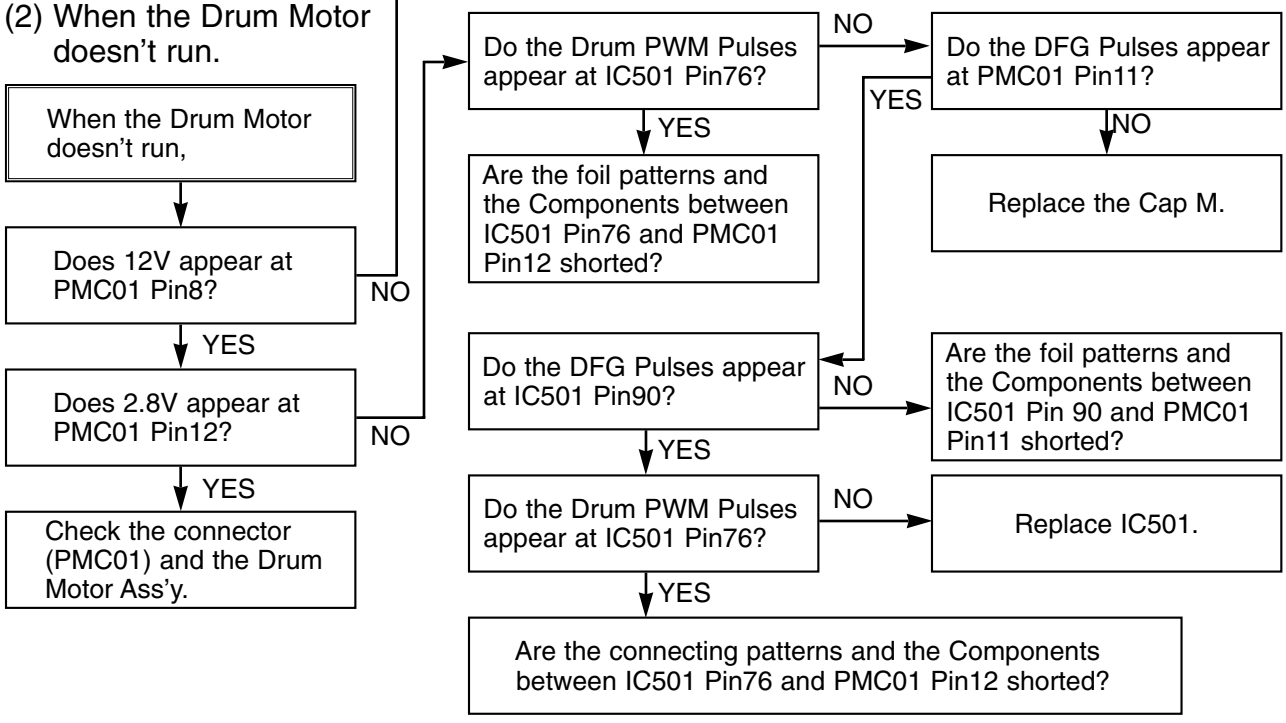
VCR ELECTRICAL TROUBLESHOOTING GUIDE

3. SERVO CIRCUIT

(1) Unstable Video in PB MODE

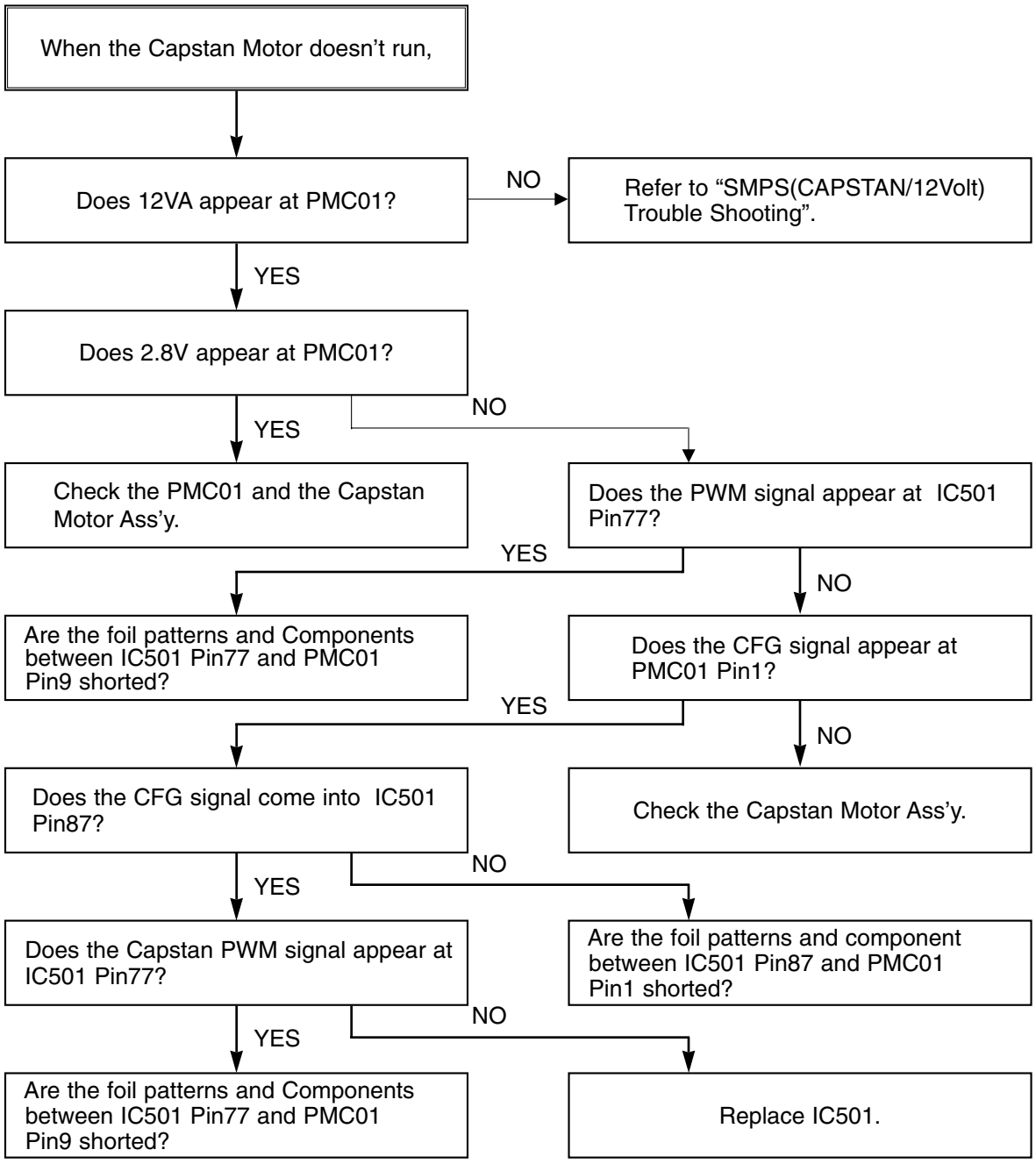

Does the Noise level of the screen change periodically?
Do the CTL pulses appear at IC501 Pin97?
NO
Is the height adjustment of the CTL Head accurate?
NO
YES
Confirm the CFG waveform at IC501 Pin87?
YES
Readjust the height of the CTL Head.
On tracking do the CTL pulses move?
NO
Replace IC501.
YES
Does the Video Envelope waveform appear at IC501 Pin9?
NO
Refer to "When the Y signal doesn't appear on the screen in PB Mode".
YES
Replace IC501.

(2) When the Drum Motor doesn't run.

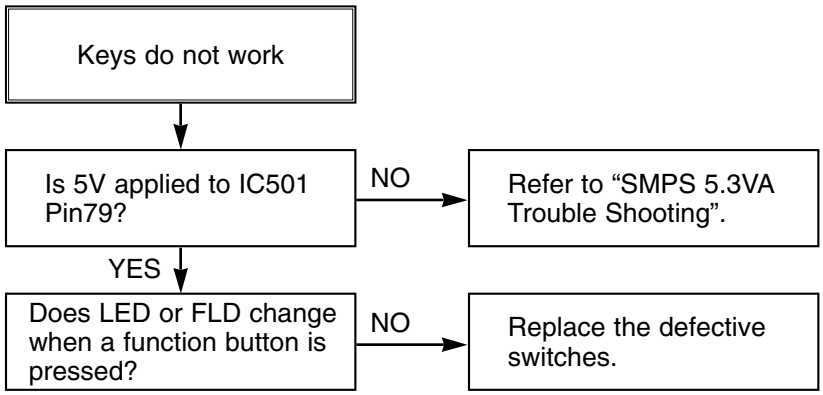

When the Drum Motor doesn't run,
Refer to "(2) No 12VA of Power section"
Do the Drum PWM Pulses appear at IC501 Pin76?
NO
Do the DFG Pulses appear at PMC01 Pin11?
YES
YES
NO
Are the foil patterns and the Components between IC501 Pin76 and PMC01 Pin12 shorted?
Replace the Cap M.
Does 12V appear at PMC01 Pin8?
NO
YES
Do the DFG Pulses appear at IC501 Pin90?
Are the foil patterns and the Components between IC501 Pin 90 and PMC01 Pin11 shorted?
NO
YES
Does 2.8V appear at PMC01 Pin12?
NO
YES
Do the Drum PWM Pulses appear at IC501 Pin76?
NO
Replace IC501.
YES
Check the connector (PMC01) and the Drum Motor Ass'y.
Are the connecting patterns and the Components between IC501 Pin76 and PMC01 Pin12 shorted?

VCR ELECTRICAL TROUBLESHOOTING GUIDE

(3) When the Capstan Motor doesn't run,

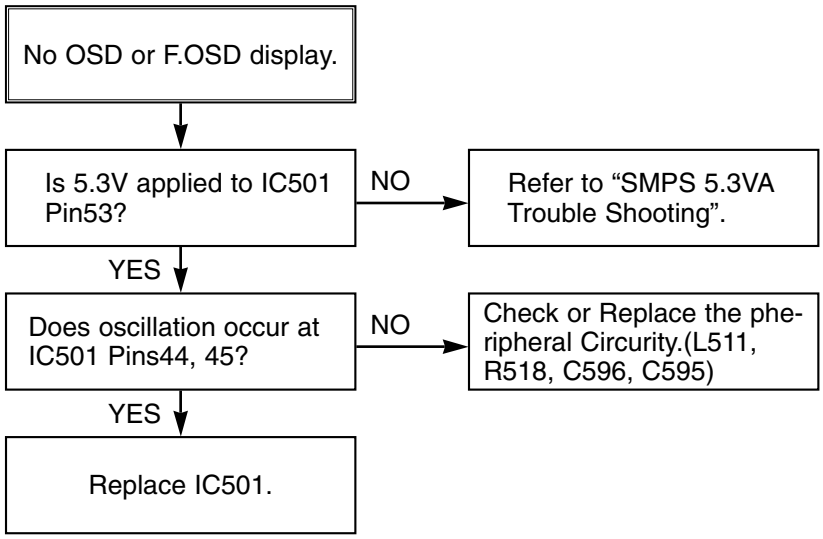

When the Capstan Motor doesn't run,
Does 12VA appear at PMC01?
NO
Refer to "SMPS(CAPSTAN/12Volt) Trouble Shooting".
YES
Does 2.8V appear at PMC01?
NO
YES
Check the PMC01 and the Capstan Motor Ass'y.
Does the PWM signal appear at IC501 Pin77?
YES
NO
Are the foil patterns and Components between IC501 Pin77 and PMC01 Pin9 shorted?
Does the CFG signal appear at PMC01 Pin1?
YES
NO
Does the CFG signal come into IC501 Pin87?
Check the Capstan Motor Ass'y.
NO
YES
Does the Capstan PWM signal appear at IC501 Pin77?
Are the foil patterns and component between IC501 Pin87 and PMC01 Pin1 shorted?
NO
YES
Are the foil patterns and Components between IC501 Pin77 and PMC01 Pin9 shorted?
Replace IC501.

(4) Keys do not work

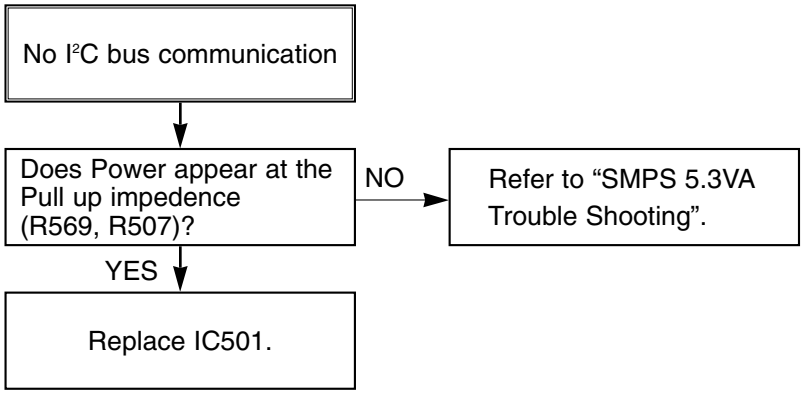

Keys do not work
Is 5V applied to IC501 Pin79?
NO
Refer to “SMPS 5.3VA Trouble Shooting”.
YES
Does LED or FLD change when a function button is pressed?
NO
Replace the defective switches.

4. OSD CIRCUIT

(1) No OSD display.



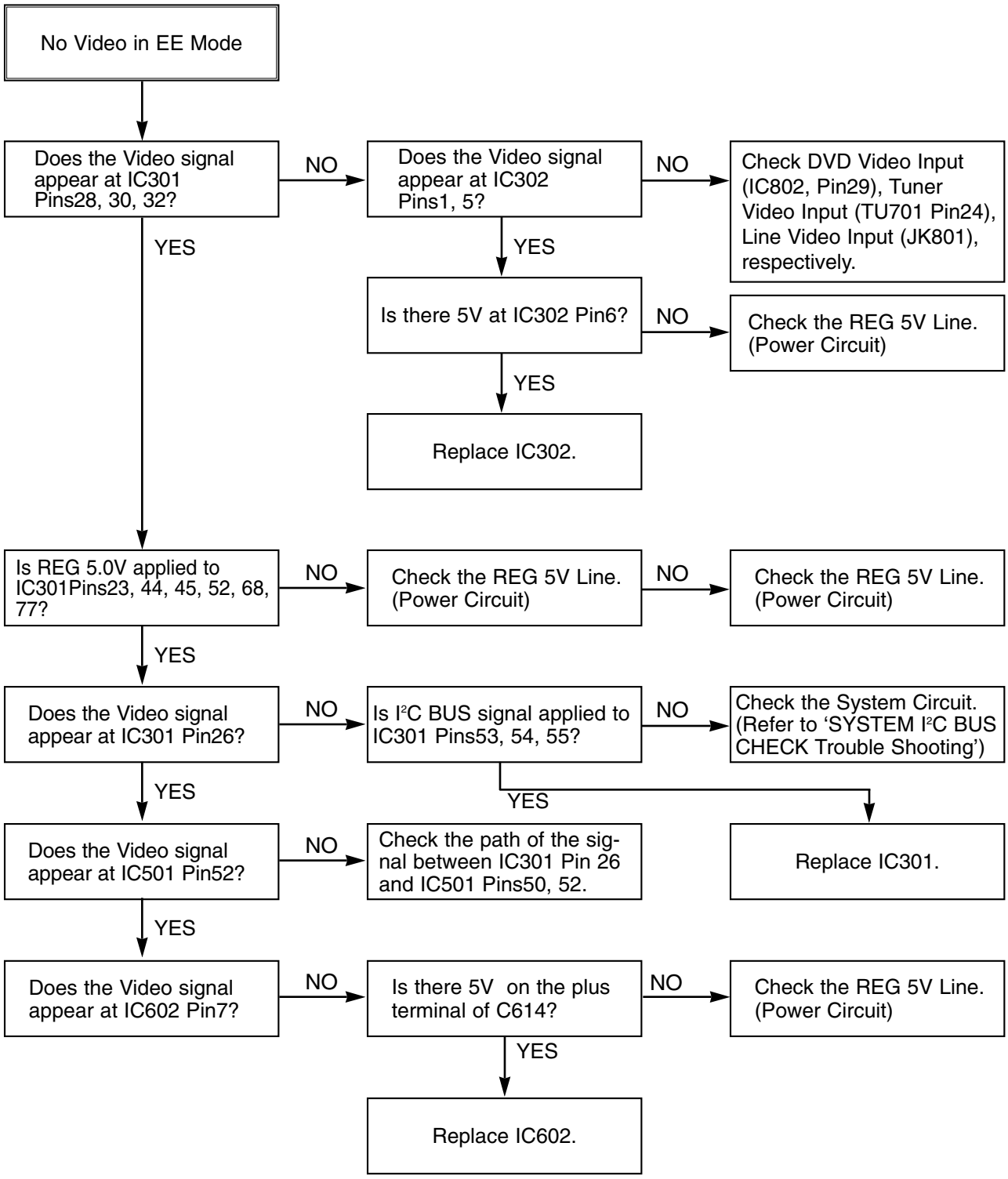
(2) I²C BUS CHECK


No I²C bus communication
Does Power appear at the Pull up impedence (R569, R507)?
NO
Refer to “SMPS 5.3VA Trouble Shooting”.
YES
Replace IC501.

VCR ELECTRICAL TROUBLESHOOTING GUIDE

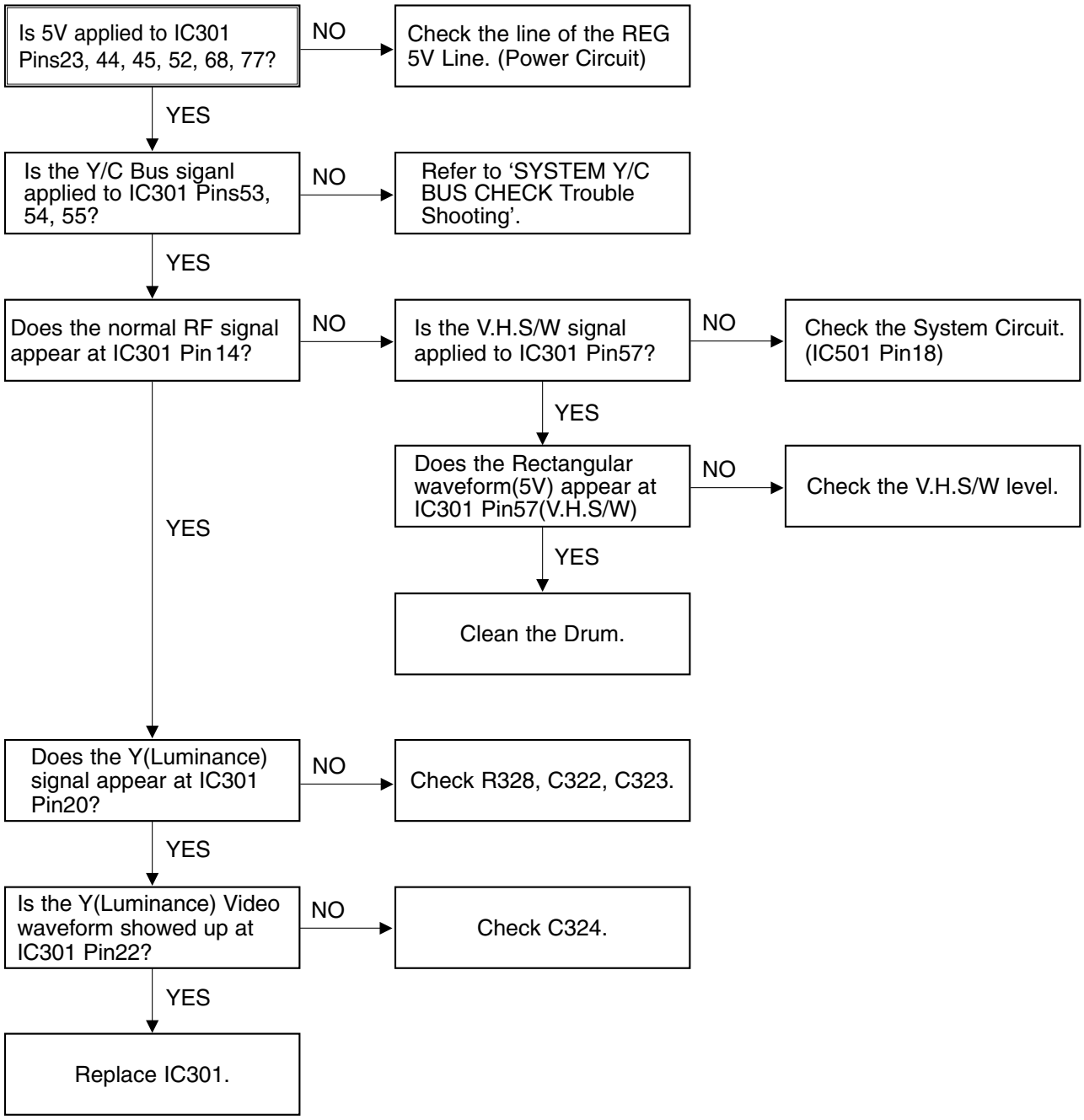
5. Y/C CIRCUIT

(1) No Video in EE Mode,


No Video in EE Mode
Does the Video signal appear at IC301 Pins28, 30, 32?
NO
Does the Video signal appear at IC302 Pins1, 5?
NO
Check DVD Video Input (IC802, Pin29), Tuner Video Input (TU701 Pin24), Line Video Input (JK801), respectively.
YES
YES
Is there 5V at IC302 Pin6?
NO
Check the REG 5V Line. (Power Circuit)
YES
Replace IC302.
Is REG 5.0V applied to IC301Pins23, 44, 45, 52, 68, 77?
NO
Check the REG 5V Line. (Power Circuit)
NO
Check the REG 5V Line. (Power Circuit)
YES
Does the Video signal appear at IC301 Pin26?
NO
Is I²C BUS signal applied to IC301 Pins53, 54, 55?
NO
Check the System Circuit. (Refer to 'SYSTEM I²C BUS CHECK Trouble Shooting')
YES
YES
Does the Video signal appear at IC501 Pin52?
NO
Check the path of the signal between IC301 Pin 26 and IC501 Pins50, 52.
Replace IC301.
YES
Does the Video signal appear at IC602 Pin7?
NO
Is there 5V on the plus terminal of C614?
NO
Check the REG 5V Line. (Power Circuit)
YES
Replace IC602.

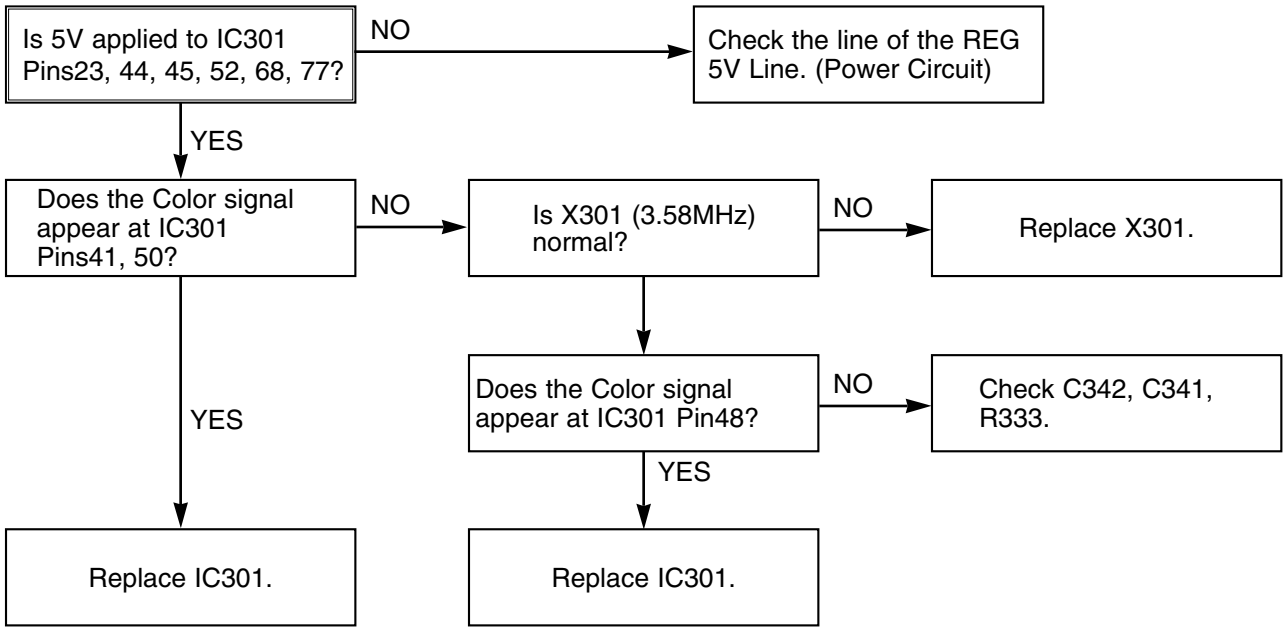
VCR ELECTRICAL TROUBLESHOOTING GUIDE

(2) When the Y(Luminance) signal doesn't appear on the screen in PB Mode,


Is 5V applied to IC301 Pins23, 44, 45, 52, 68, 77?
NO
Check the line of the REG 5V Line. (Power Circuit)
YES
Is the Y/C Bus siganl applied to IC301 Pins53, 54, 55?
NO
Refer to 'SYSTEM Y/C BUS CHECK Trouble Shooting'.
YES
Does the normal RF signal appear at IC301 Pin 14?
NO
Is the V.H.S/W signal applied to IC301 Pin57?
NO
Check the System Circuit. (IC501 Pin18)
YES
Does the Rectangular waveform(5V) appear at IC301 Pin57(V.H.S/W)
NO
Check the V.H.S/W level.
YES
YES
Clean the Drum.
Does the Y(Luminance) signal appear at IC301 Pin20?
NO
Check R328, C322, C323.
YES
Is the Y(Luminance) Video waveform showed up at IC301 Pin22?
NO
Check C324.
YES
Replace IC301.

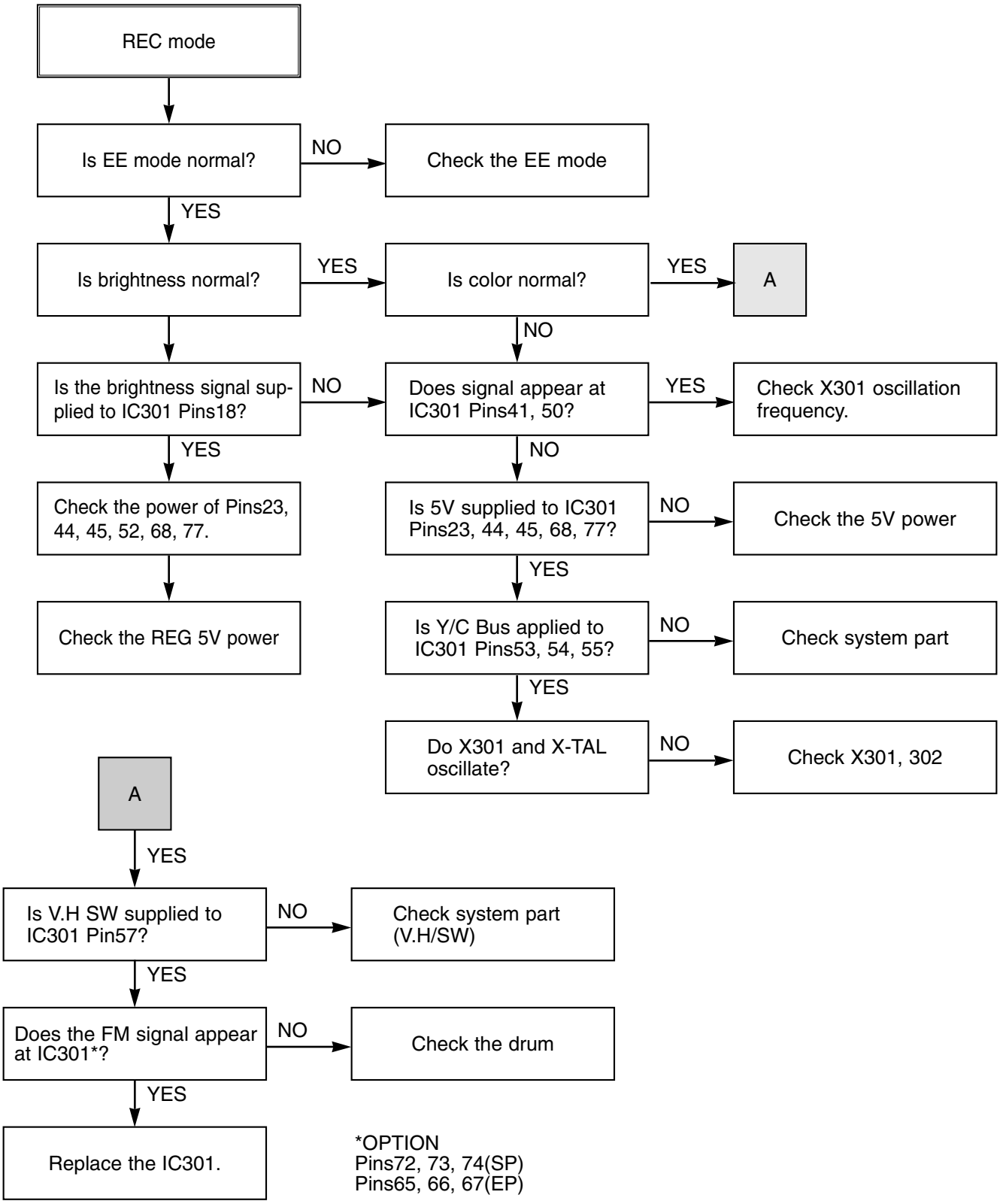
VCR ELECTRICAL TROUBLESHOOTING GUIDE

(3) When the C(Color) signal doesn't appear on the screen in PB Mode,



VCR ELECTRICAL TROUBLESHOOTING GUIDE

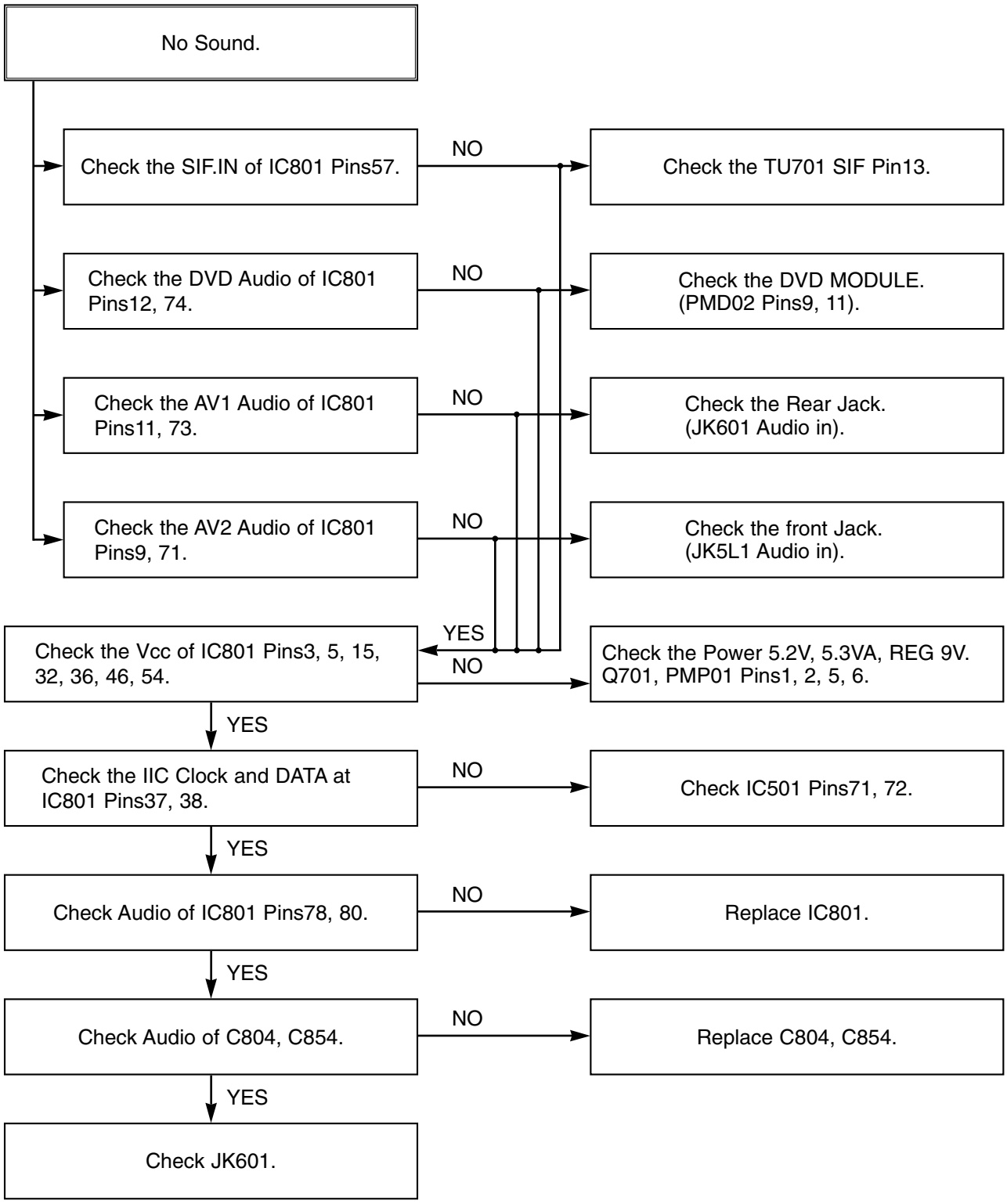
(4) When the Video signal doesn't appear on the screen in REC Mode,



VCR ELECTRICAL TROUBLESHOOTING GUIDE

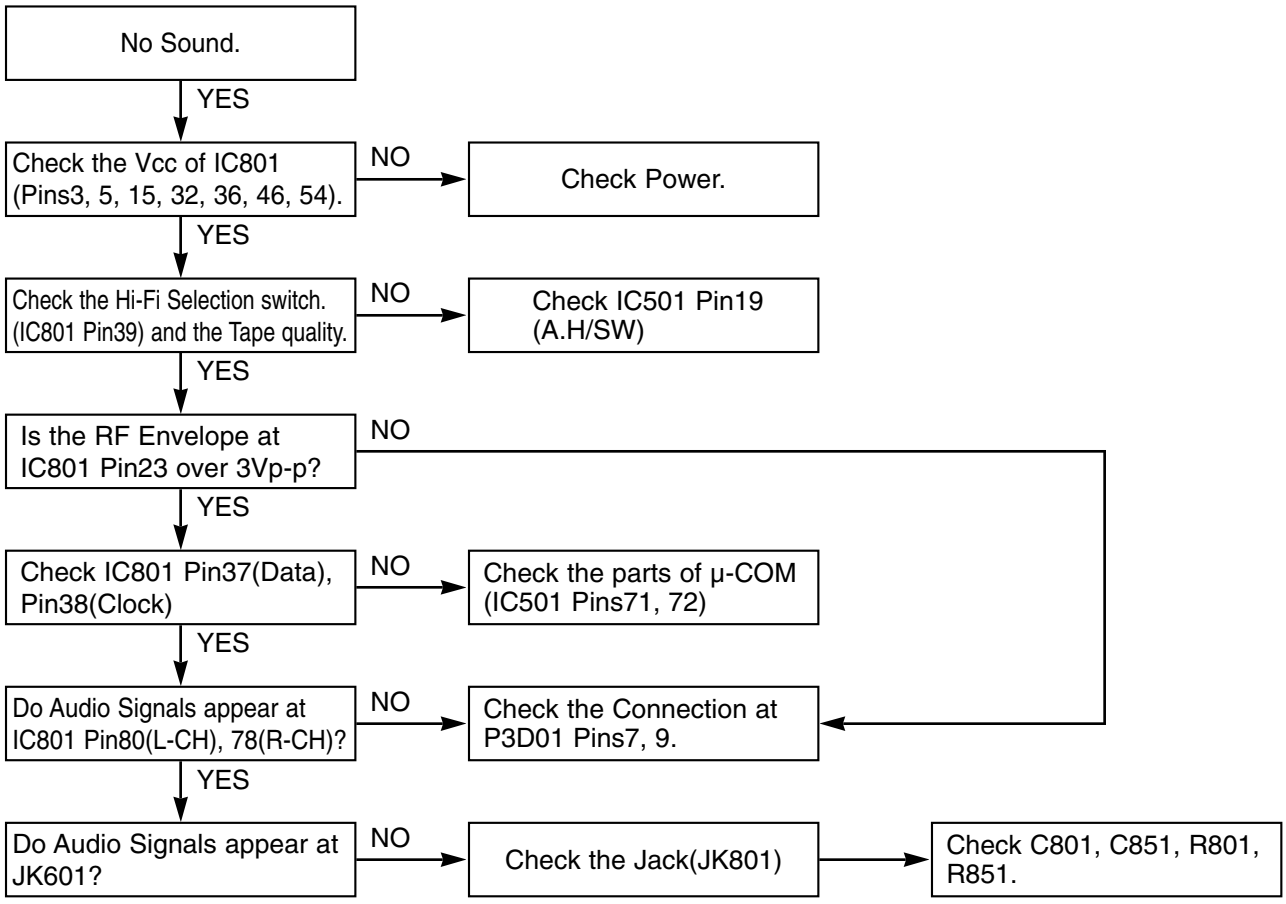
6. Hi-Fi CIRCUIT

(1) No Sound(EE Mode)


No Sound.
Check the SIF.IN of IC801 Pins57.
NO
Check the TU701 SIF Pin13.
Check the DVD Audio of IC801 Pins12, 74.
NO
Check the DVD MODULE. (PMD02 Pins9, 11).
Check the AV1 Audio of IC801 Pins11, 73.
NO
Check the Rear Jack. (JK601 Audio in).
Check the AV2 Audio of IC801 Pins9, 71.
NO
Check the front Jack. (JK5L1 Audio in).
Check the Vcc of IC801 Pins3, 5, 15, 32, 36, 46, 54.
YES
NO
Check the Power 5.2V, 5.3VA, REG 9V. Q701, PMP01 Pins1, 2, 5, 6.
YES
Check the IIC Clock and DATA at IC801 Pins37, 38.
NO
Check IC501 Pins71, 72.
YES
Check Audio of IC801 Pins78, 80.
NO
Replace IC801.
YES
Check Audio of C804, C854.
NO
Replace C804, C854.
YES
Check JK601.

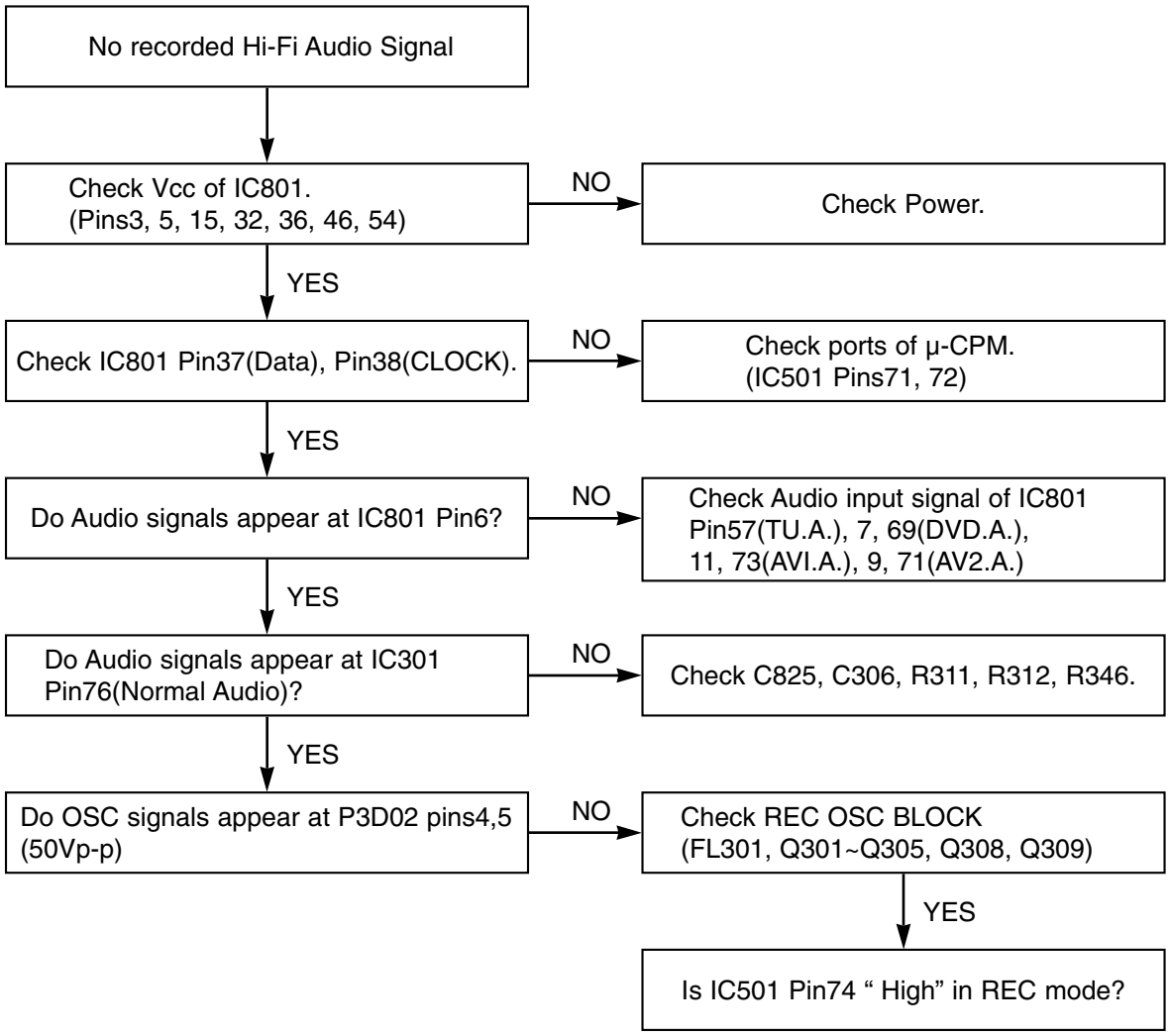
VCR ELECTRICAL TROUBLESHOOTING GUIDE

(2) Hi-Fi Playback



VCR ELECTRICAL TROUBLESHOOTING GUIDE

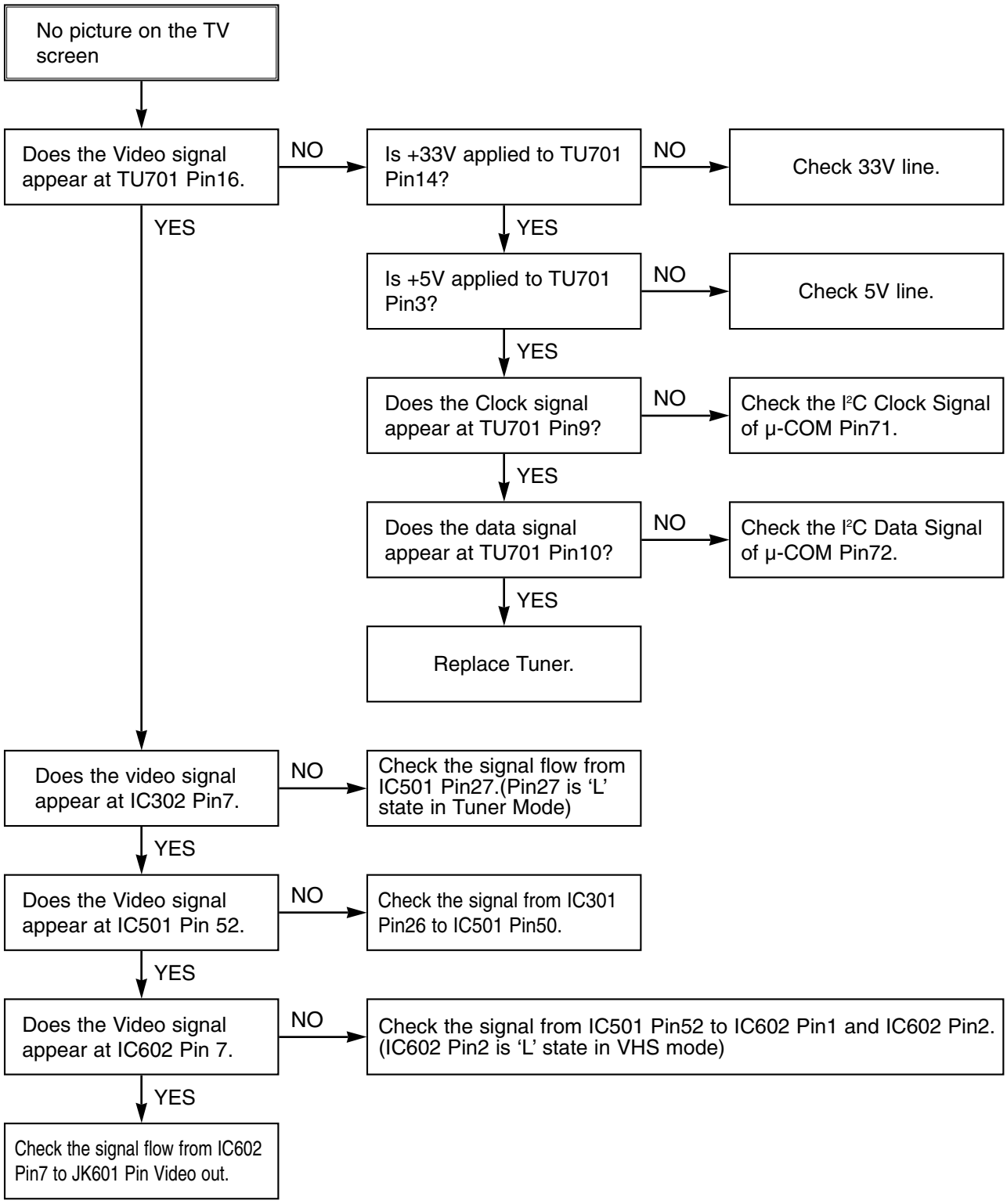
(3) Hi-Fi REC



VCR ELECTRICAL TROUBLESHOOTING GUIDE

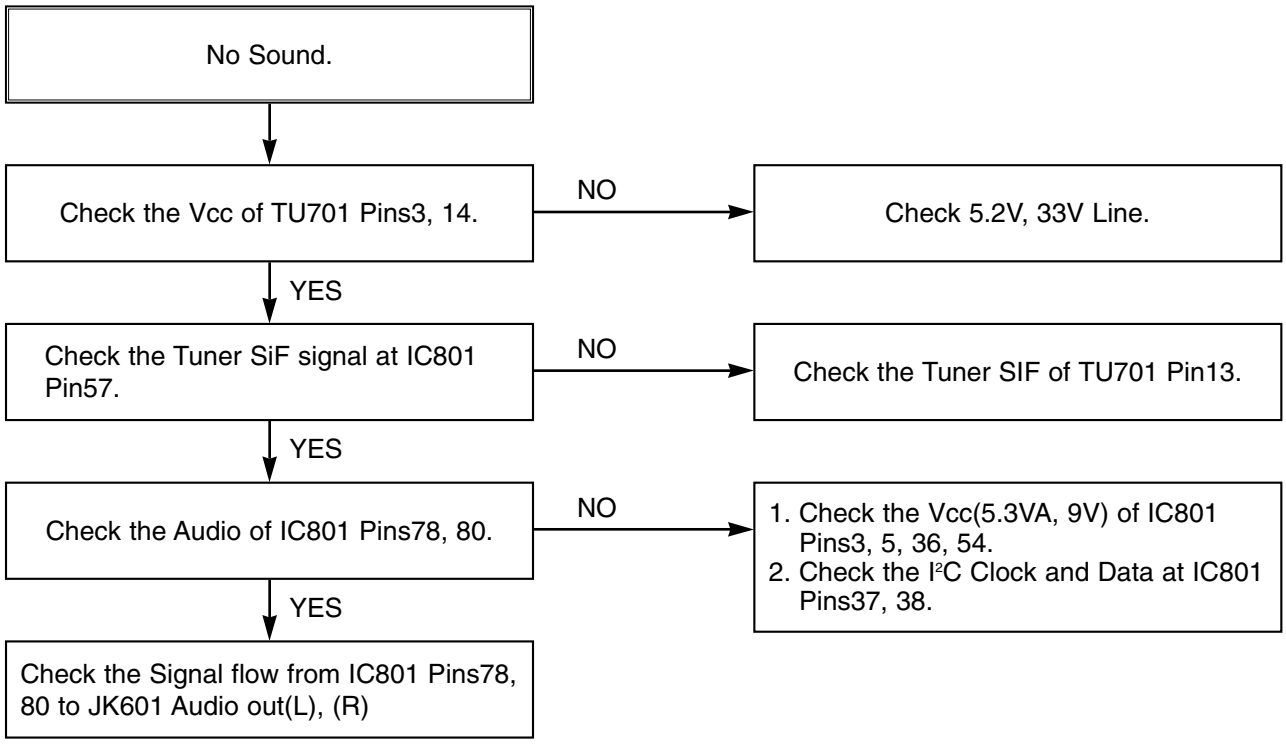
7. Tuner/IF CIRCUIT

(1) No Picture on the TV screen


No picture on the TV screen
Does the Video signal appear at TU701 Pin16.
NO
Is +33V applied to TU701 Pin14?
NO
Check 33V line.
YES
YES
Is +5V applied to TU701 Pin3?
NO
Check 5V line.
YES
Does the Clock signal appear at TU701 Pin9?
NO
Check the I²C Clock Signal of µ-COM Pin71.
YES
Does the data signal appear at TU701 Pin10?
NO
Check the I²C Data Signal of µ-COM Pin72.
YES
Replace Tuner.
Does the video signal appear at IC302 Pin7.
NO
Check the signal flow from IC501 Pin27.(Pin27 is 'L' state in Tuner Mode)
YES
Does the Video signal appear at IC501 Pin 52.
NO
Check the signal from IC301 Pin26 to IC501 Pin50.
YES
Does the Video signal appear at IC602 Pin 7.
NO
Check the signal from IC501 Pin52 to IC602 Pin1 and IC602 Pin2. (IC602 Pin2 is 'L' state in VHS mode)
YES
Check the signal flow from IC602 Pin7 to JK601 Pin Video out.

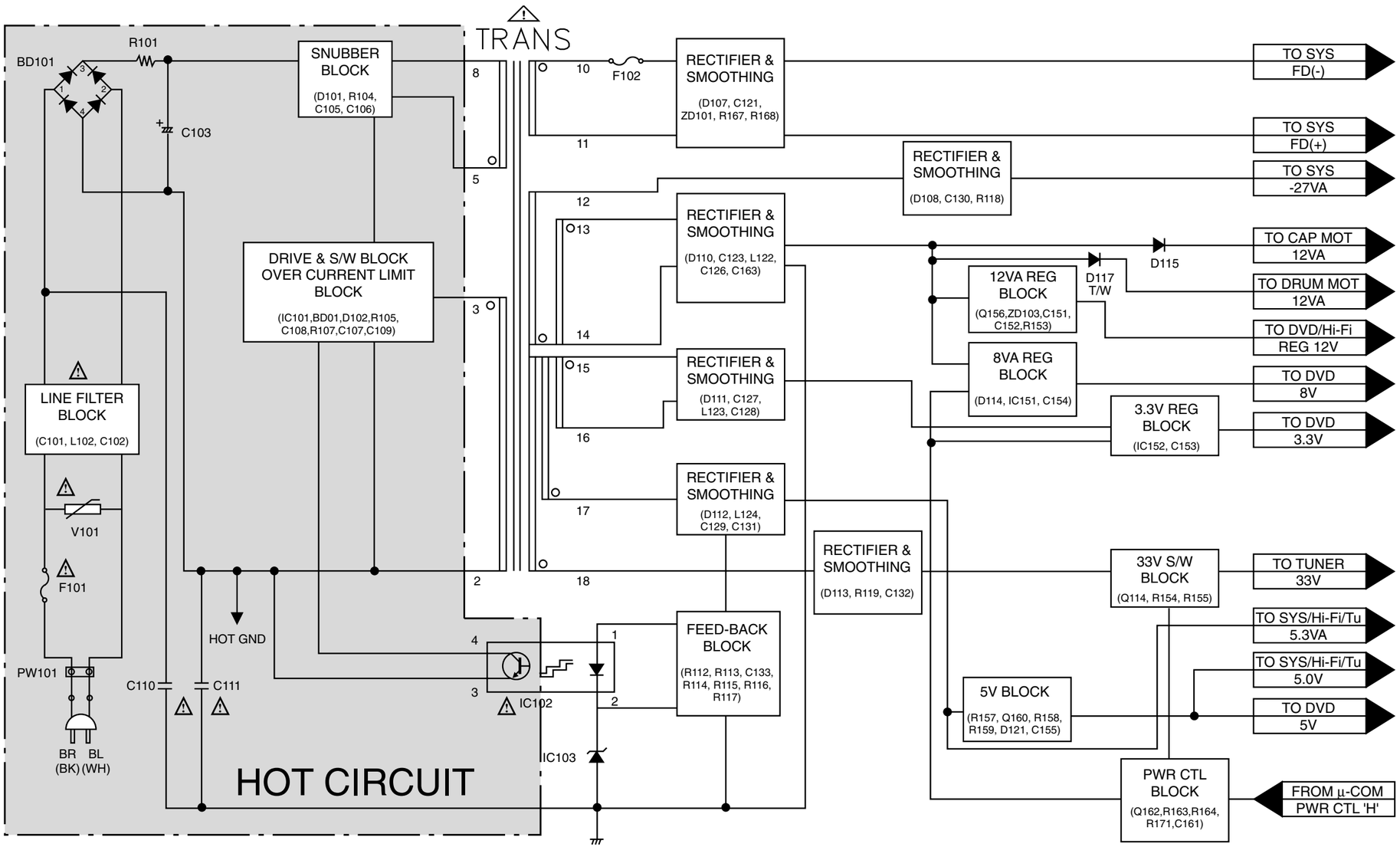
VCR ELECTRICAL TROUBLESHOOTING GUIDE

(2) No Sound


No Sound.
Check the Vcc of TU701 Pins3, 14.
NO
Check 5.2V, 33V Line.
YES
Check the Tuner SiF signal at IC801 Pin57.
NO
Check the Tuner SIF of TU701 Pin13.
YES
Check the Audio of IC801 Pins78, 80.
NO
1. Check the Vcc(5.3VA, 9V) of IC801 Pins3, 5, 36, 54.
2. Check the I²C Clock and Data at IC801 Pins37, 38.
YES
Check the Signal flow from IC801 Pins78, 80 to JK601 Audio out(L), (R)

BLOCK DIAGRAMS

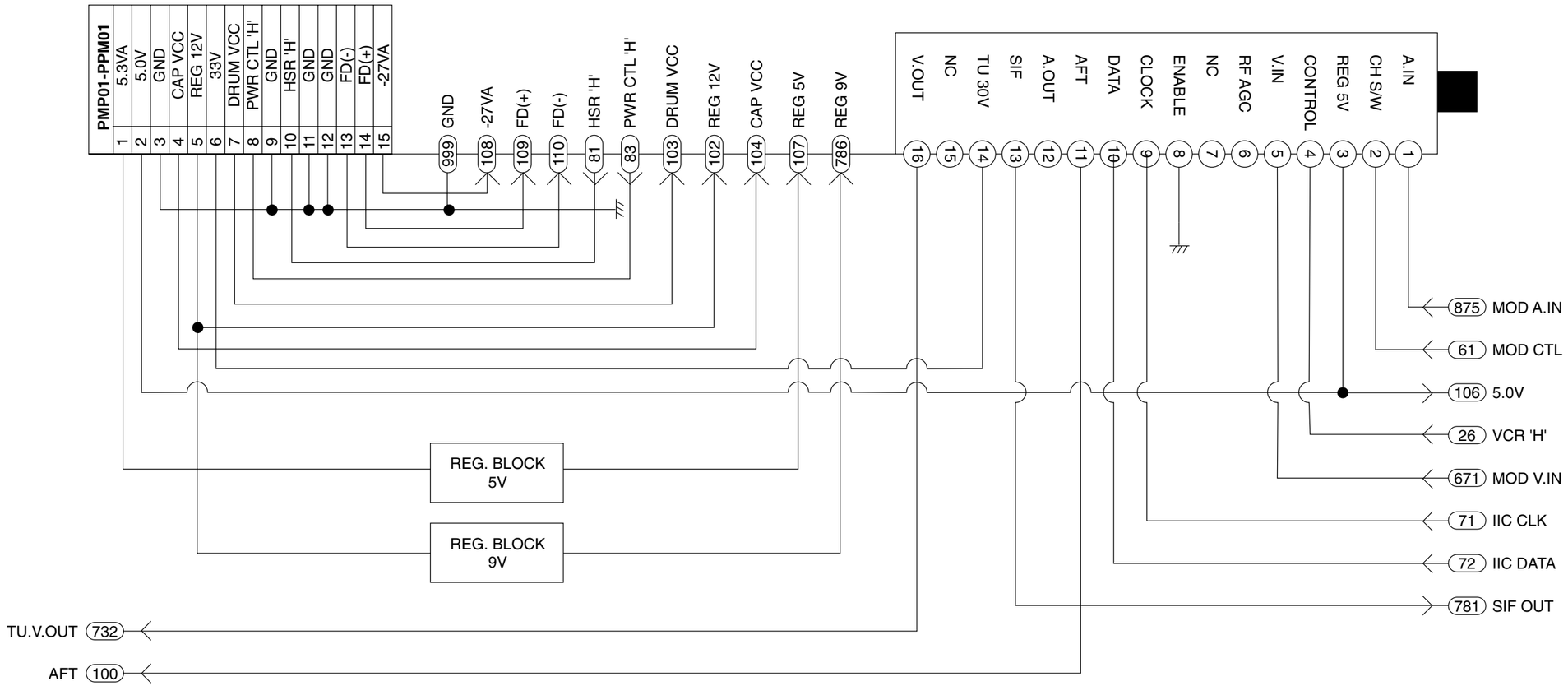
1. POWER(SMPS) BLOCK DIAGRAM



NOTES : Symbol denotes AC ground.

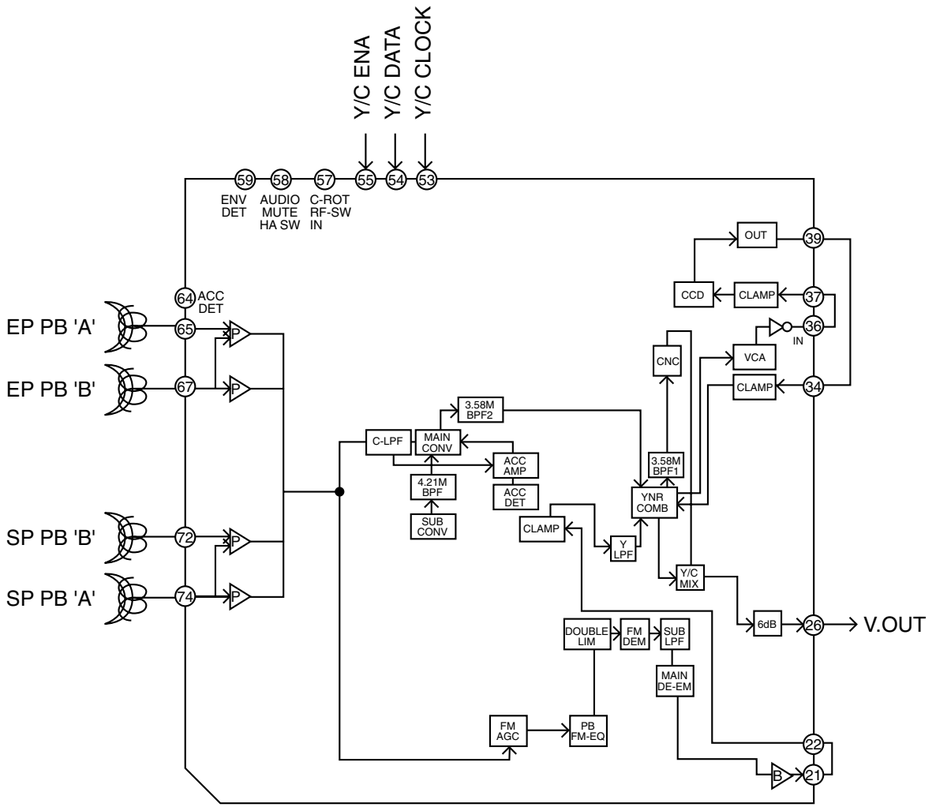
Symbol denotes DC chassis ground.

2. TU/IF BLOCK DIAGRAM

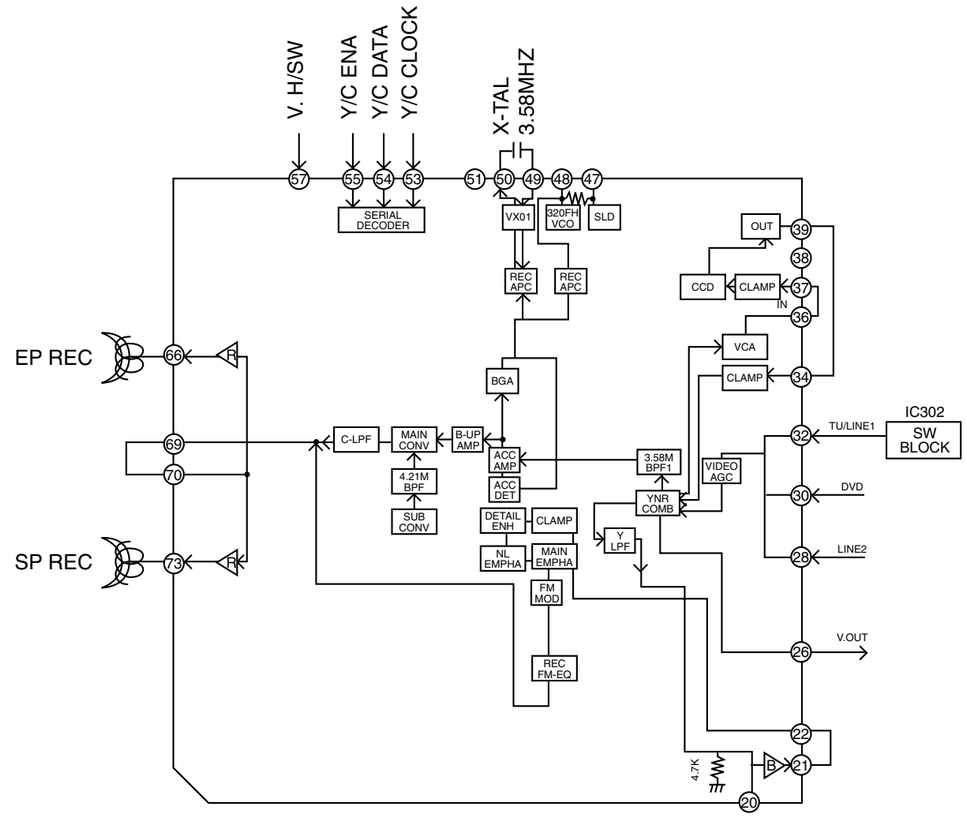


3. Y/C BLOCK DIAGRAM

(PB Mode)

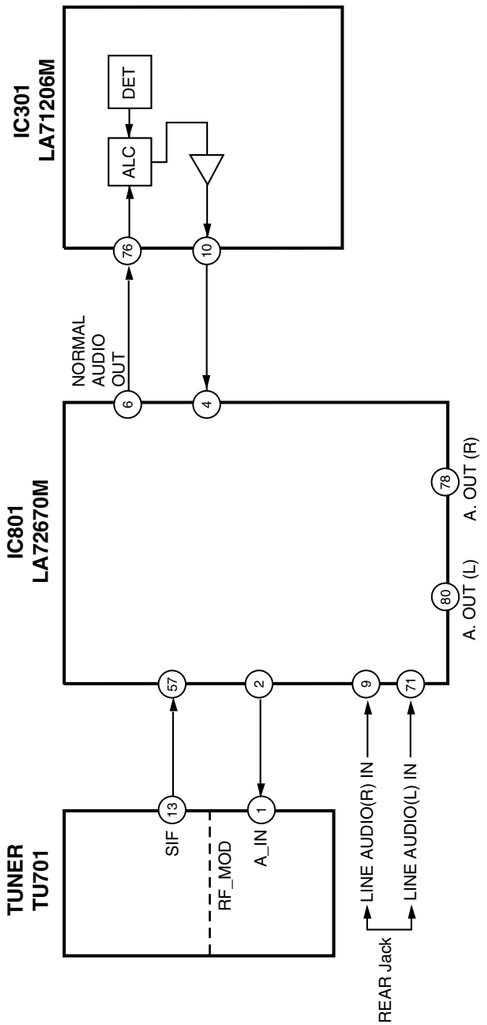


(REC Mode)

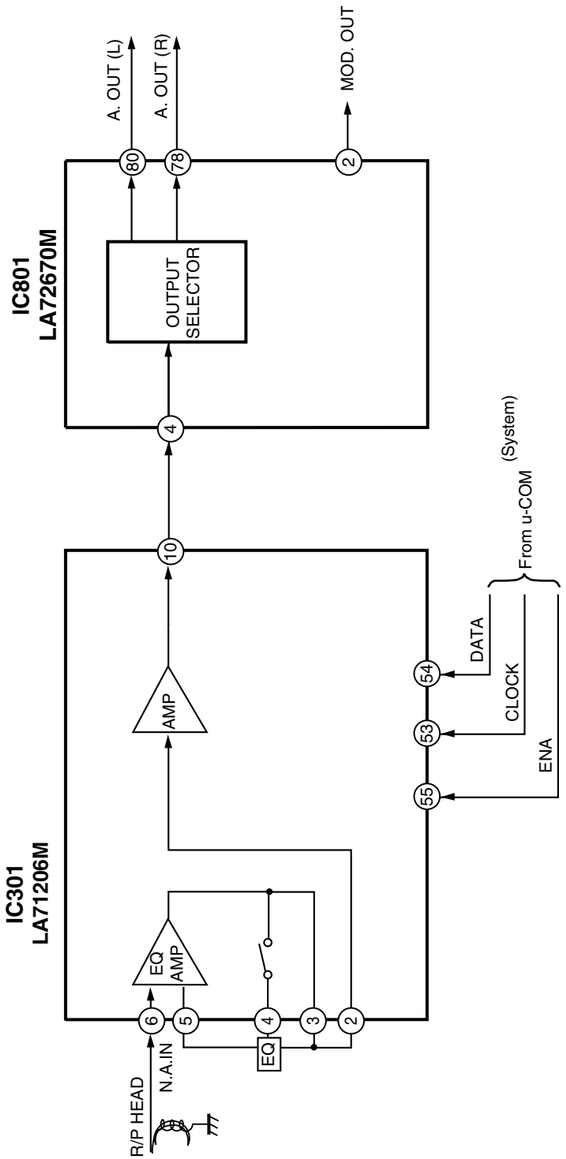


4. NORMAL AUDIO BLOCK DIAGRAM

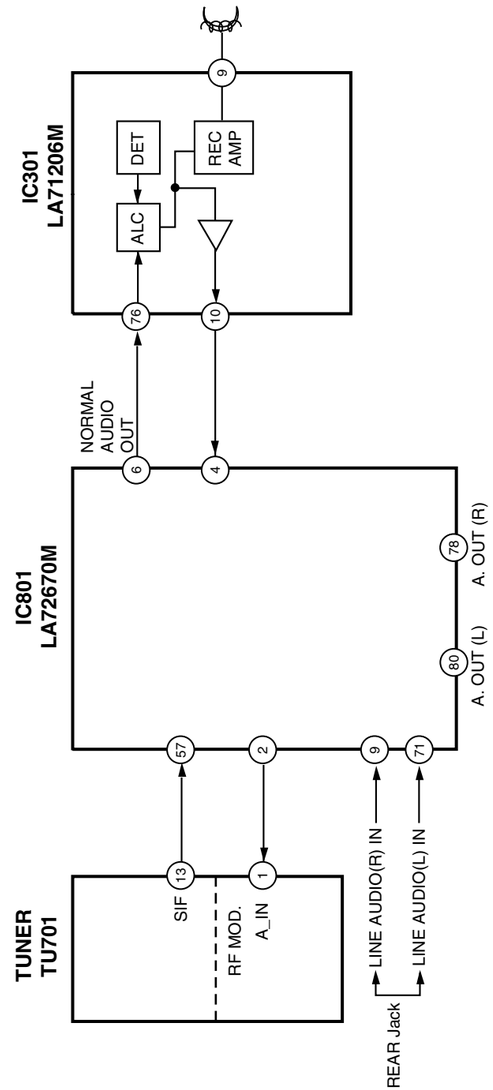
(EE Mode)



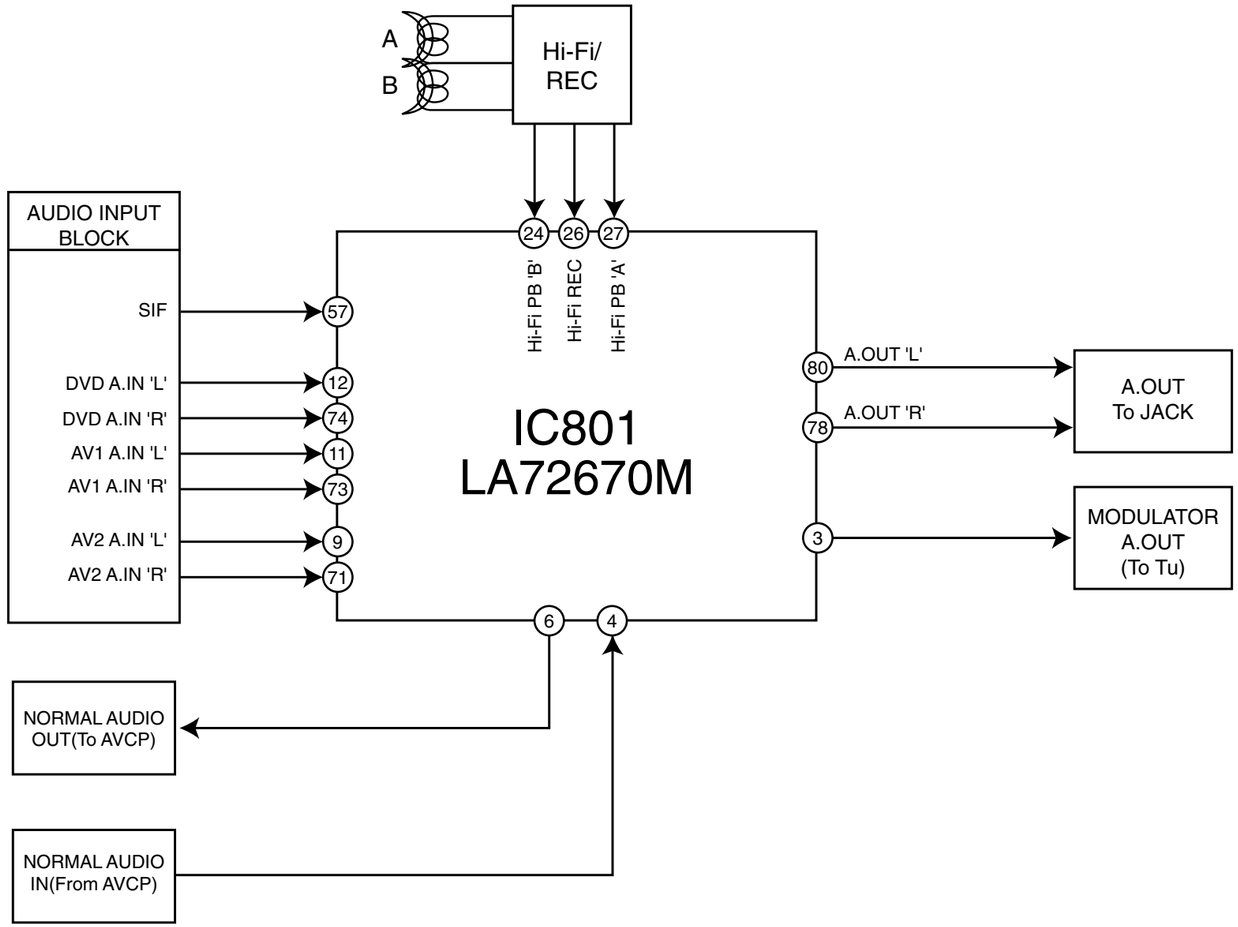
(PB Mode)



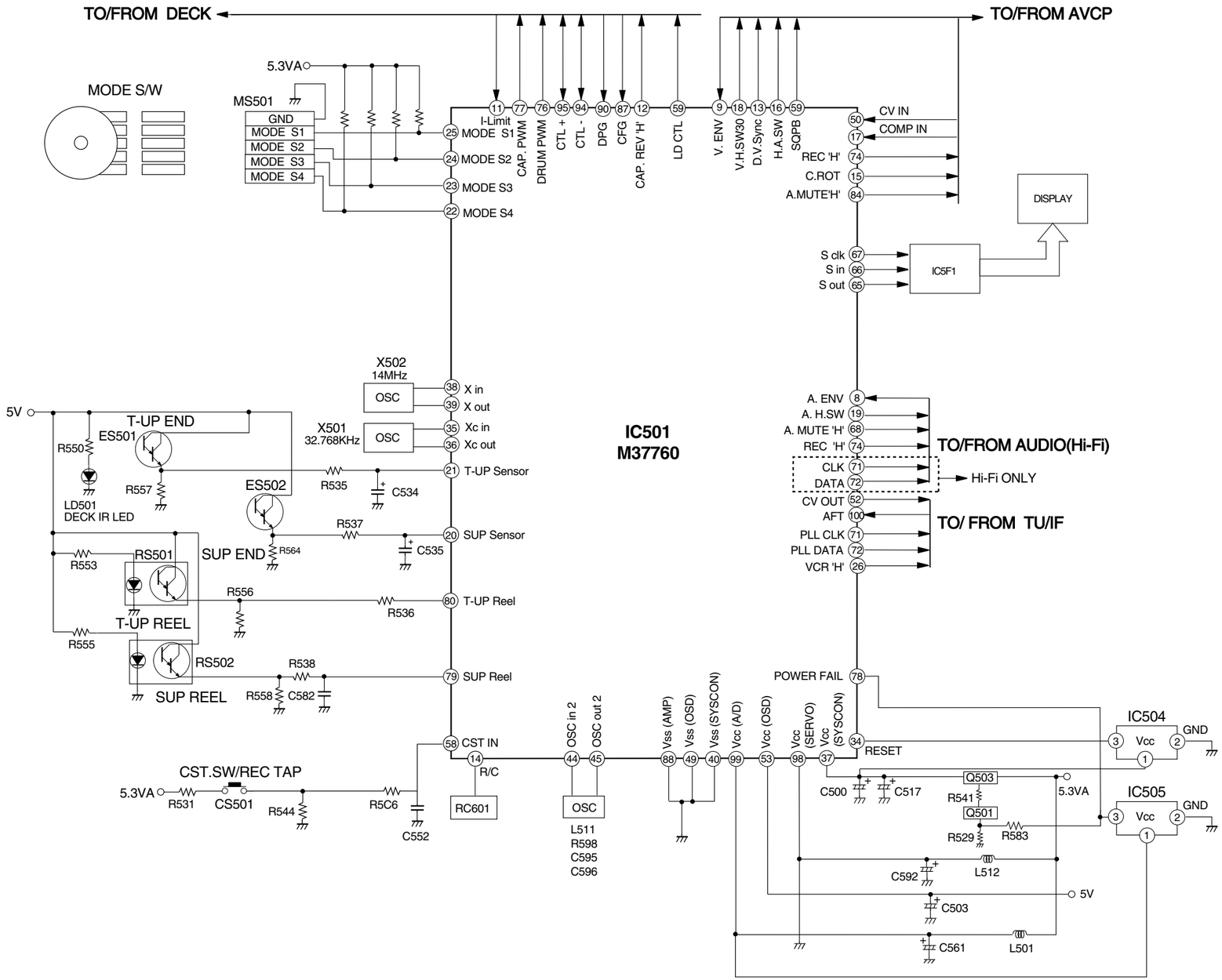
(REC Mode)



5. Hi-Fi BLOCK DIAGRAM



6. SYSTEM BLOCK DIAGRAM



CIRCUIT DIAGRAMS

1. POWER(SMPS) CIRCUIT DIAGRAM

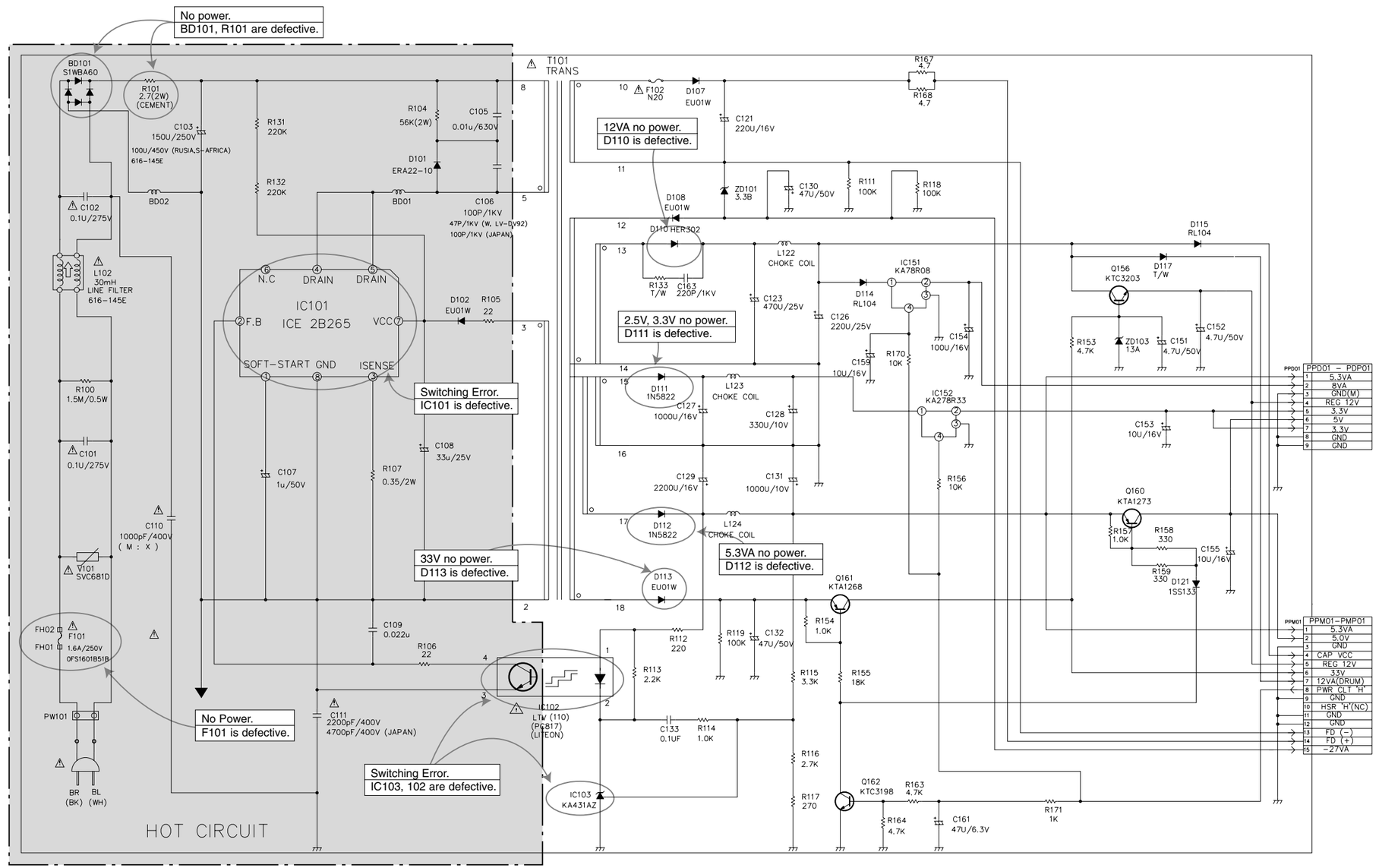
IMPORTANT SAFETY NOTICE

WHEN SERVICING THIS CHASSIS, UNDER NO CIRCUMSTANCES SHOULD THE ORIGINAL DESIGN BE MODIFIED OR ALTERED WITHOUT PERMISSION FROM THE ZENITH ELECTRONICS CORPORATION. ALL COMPONENTS SHOULD BE REPLACED ONLY WITH TYPES IDENTICAL TO THOSE IN THE ORIGINAL CIRCUIT. SPECIAL COMPONENTS ARE SHADED ON THE SCHEMATIC FOR EASY IDENTIFICATION.

THIS CIRCUIT DIAGRAM MAY OCCASIONALLY DIFFER FROM THE ACTUAL CIRCUIT USED. THIS WAY, IMPLEMENTATION OF THE LATEST SAFETY AND PERFORMANCE IMPROVEMENT CHANGES INTO THE SET IS NOT DELAYED UNTIL THE NEW SERVICE LITERATURE IS PRINTED.

NOTE :

1. Shaded(■) parts are critical for safety. Replace only with specified part number.
2. Voltages are DC-measured with a digital voltmeter during Play mode.



LOCATION GUIDE

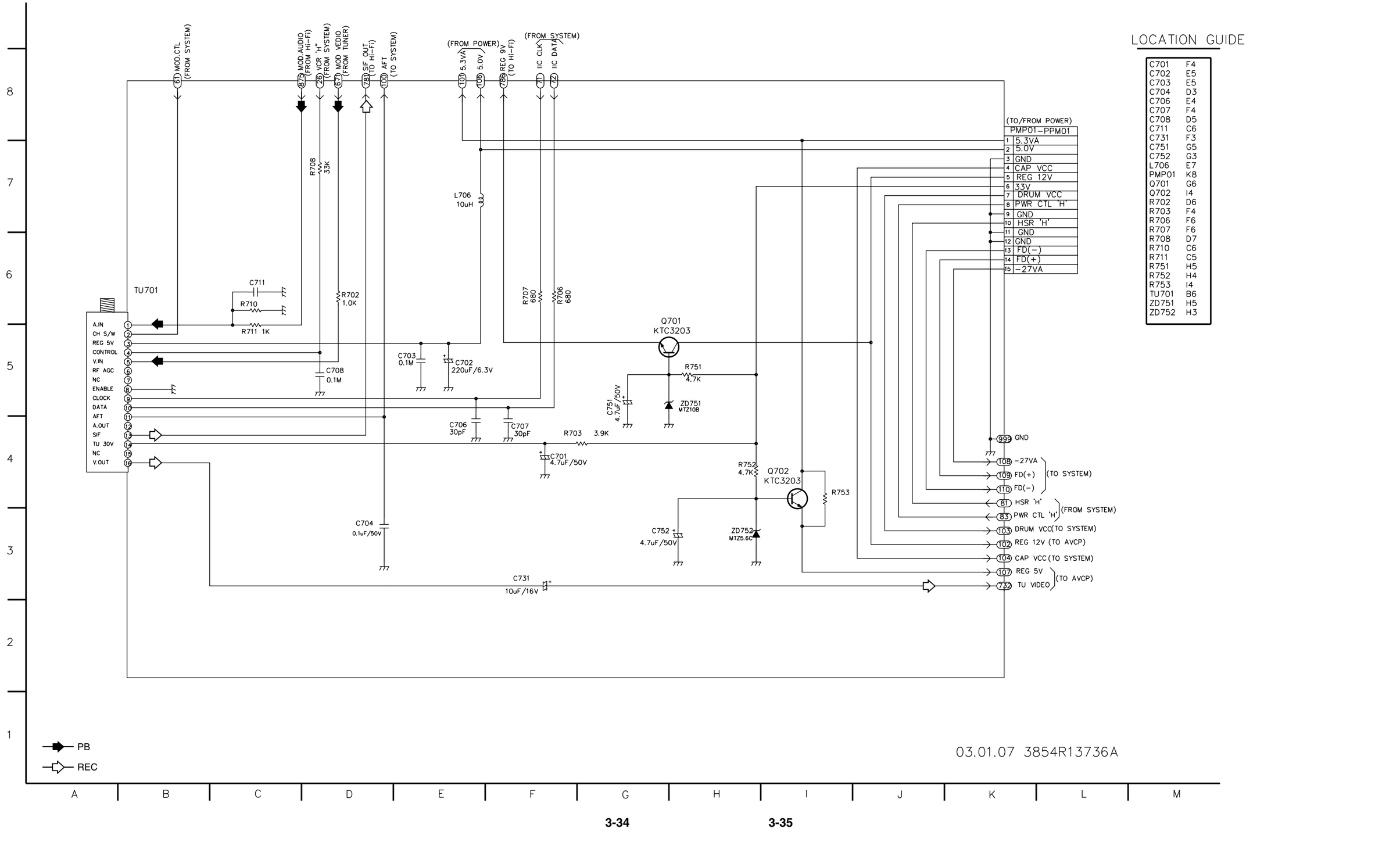
BD01	F10
BD02	C10
BD101	B11
C101	B7
C102	B10
C103	C11
C105	F11
C106	G10
C107	D7
C108	F7
C109	E5
C110	C6
C111	E4
C121	J11
C123	J9
C126	K8
C127	I7
C128	J7
C129	I6
C130	J10
C131	J6
C132	J5
C133	I4
C151	O8
C152	O8
C153	N7
C154	L8
C155	O6
C159	K8
C161	L2
C163	I9
D101	F10
D102	F9
D107	I11
D108	I10
D110	I9
D111	I7
D112	I6
D113	I5
D114	K9
D115	O9
D117	N9
D121	O5
F102	H11
FH01	A4
FH02	A5
IC101	D8
IC102	G4
IC103	H3
IC151	K9
IC152	L7
L102	B9
L122	J9
L123	I8
L124	I6
Q156	N9
Q160	N6
Q161	K5
Q162	K3
R100	B7
R101	C11
R104	F11
R105	G9
R106	F4
R107	E7
R111	K10
R112	I5
R113	H4
R114	I4
R115	J4
R116	J3
R117	J3
R118	L10
R119	I5
R131	D11
R132	D10
R133	I9
R153	N8
R154	J5
R155	K4
R156	L6
R157	N6
R158	N6
R159	N5
R163	L3
R164	K2
R167	L11
R168	L11
R170	K8
R171	M3
T101	G11
V101	B5
ZD101	J10
ZD103	N8

NOTES) ⏚ Symbol denotes AC ground.
⏚ Symbol denotes DC chassis ground.

NOTE) ⚠ Warning
Parts that are shaded are critical With respect to risk of fire or electricial shock.

03.01.07 3854R13731A

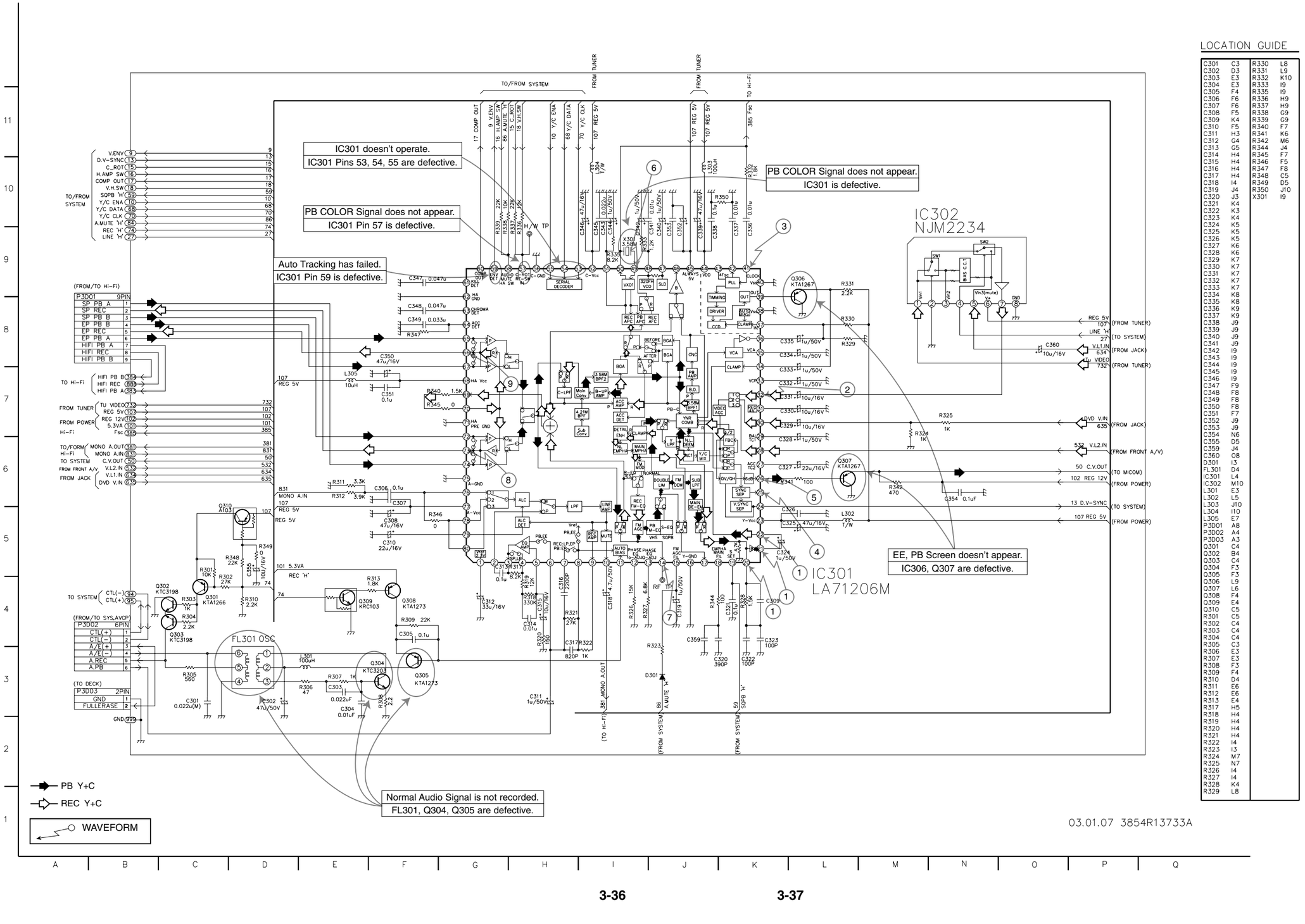
2. TU/IF CIRCUIT DIAGRAM



LOCATION GUIDE

C701	F4
C702	E5
C703	E5
C704	D3
C706	E4
C707	F4
C708	D5
C711	C6
C731	F3
C751	G5
C752	G3
L706	E7
PMP01	K8
Q701	G6
Q702	I4
R702	D6
R703	F4
R706	F6
R707	F6
R708	D7
R710	C6
R711	C5
R751	H5
R752	H4
R753	I4
TU701	B6
ZD751	H5
ZD752	H3

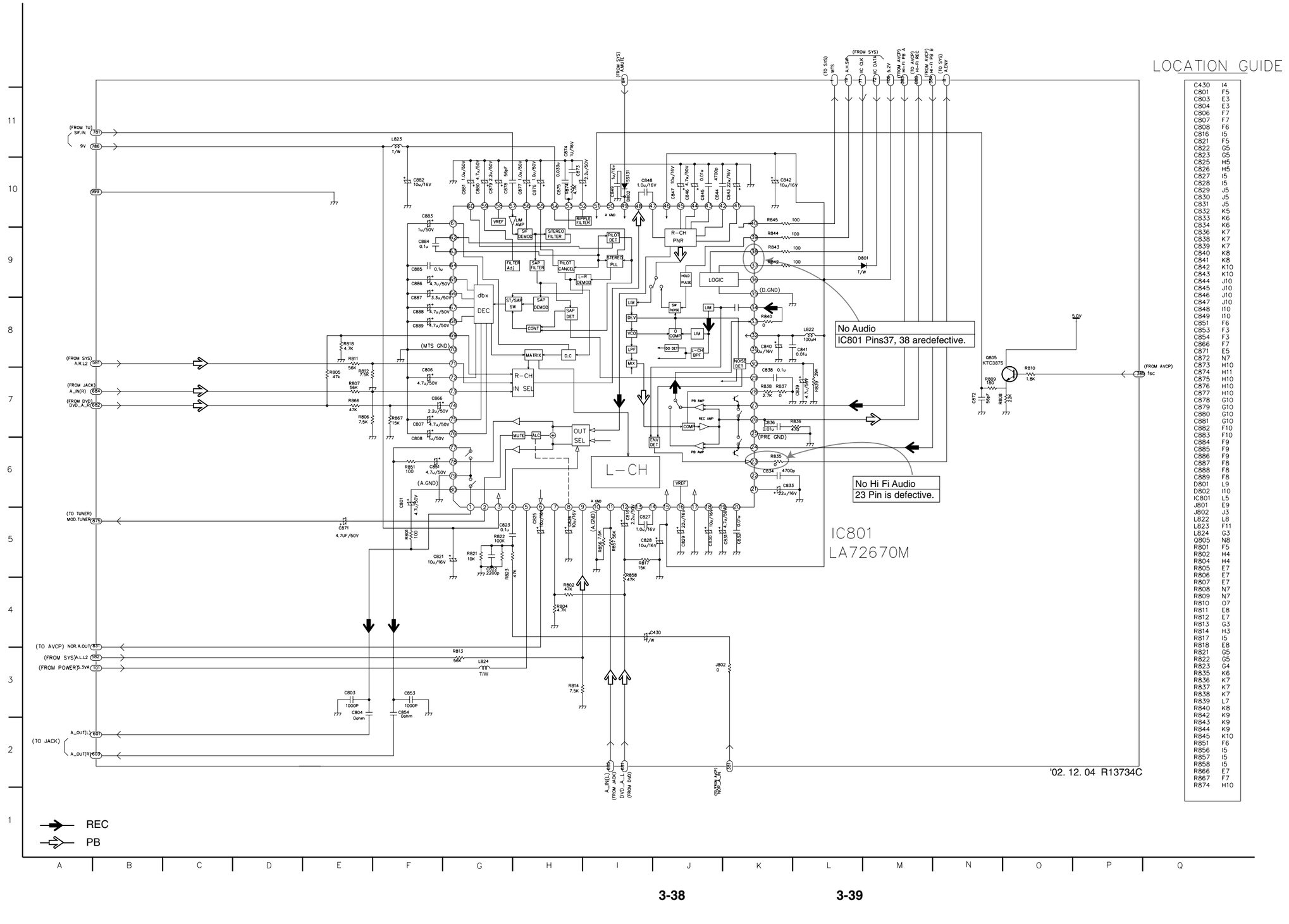
3. A/V CIRCUIT DIAGRAM



LOCATION GUIDE			
C301	C3	R330	L8
C302	D3	R331	L9
C303	E3	R332	K10
C304	E3	R333	I9
C305	F4	R335	I9
C306	F6	R336	H9
C307	F6	R337	H9
C308	F5	R338	G9
C309	K4	R339	G9
C310	F5	R340	F7
C311	H3	R341	K6
C312	G4	R342	M6
C313	G5	R344	J4
C314	H4	R345	F7
C315	H4	R346	F5
C316	H4	R347	F8
C317	H4	R348	C5
C318	I4	R349	D5
C319	J4	R350	J10
C320	J3	X301	I9
C321	K4		
C322	K3		
C323	K4		
C324	K5		
C325	K5		
C326	K5		
C327	K6		
C328	K6		
C329	K7		
C330	K7		
C331	K7		
C332	K7		
C333	K7		
C334	K8		
C335	K8		
C336	K9		
C337	K9		
C338	J9		
C339	J9		
C340	J9		
C341	J9		
C342	I9		
C343	I9		
C344	I9		
C345	I9		
C346	I9		
C347	F9		
C348	F8		
C349	F8		
C350	F8		
C351	F7		
C352	J9		
C353	J9		
C354	N6		
C355	D5		
C359	J4		
C360	O8		
D301	I3		
FL301	D4		
IC301	L4		
IC302	M10		
L301	E3		
L302	L5		
L303	J10		
L304	I10		
L305	E7		
P3D01	A8		
P3D02	A4		
P3D03	A3		
Q301	C4		
Q302	B4		
Q303	C4		
Q304	F3		
Q305	F3		
Q306	L9		
Q307	L6		
Q308	F4		
Q309	E4		
Q310	C5		
R301	C5		
R302	C4		
R303	C4		
R304	C4		
R305	C3		
R306	E3		
R307	E3		
R308	F3		
R309	F4		
R310	D4		
R311	E6		
R312	E6		
R313	E4		
R317	H5		
R318	H4		
R319	H4		
R320	H4		
R321	H4		
R322	I4		
R323	I3		
R324	M7		
R325	N7		
R326	I4		
R327	I4		
R328	K4		
R329	L8		

03.01.07 3854R13733A

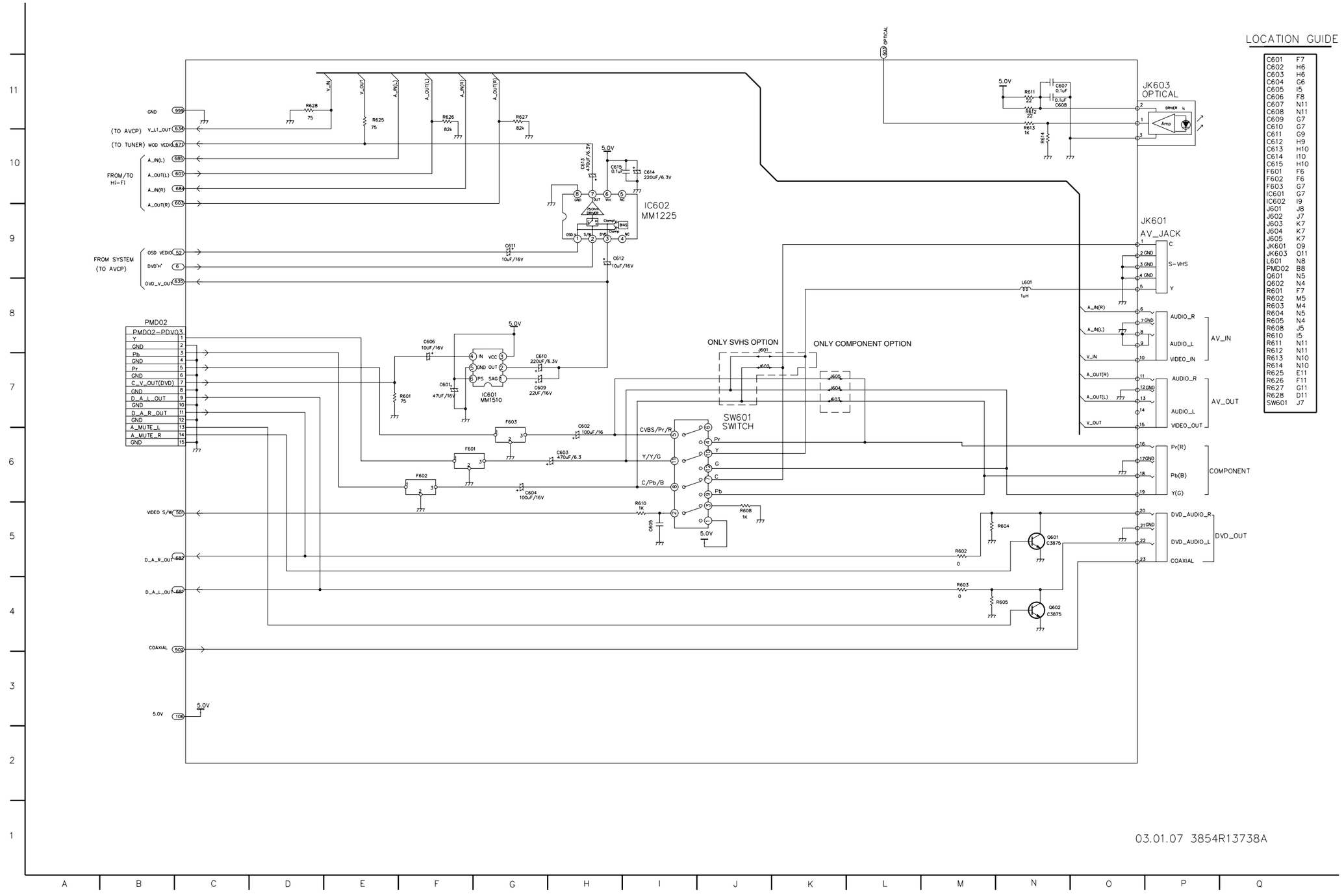
4. Hi-Fi CIRCUIT DIAGRAM



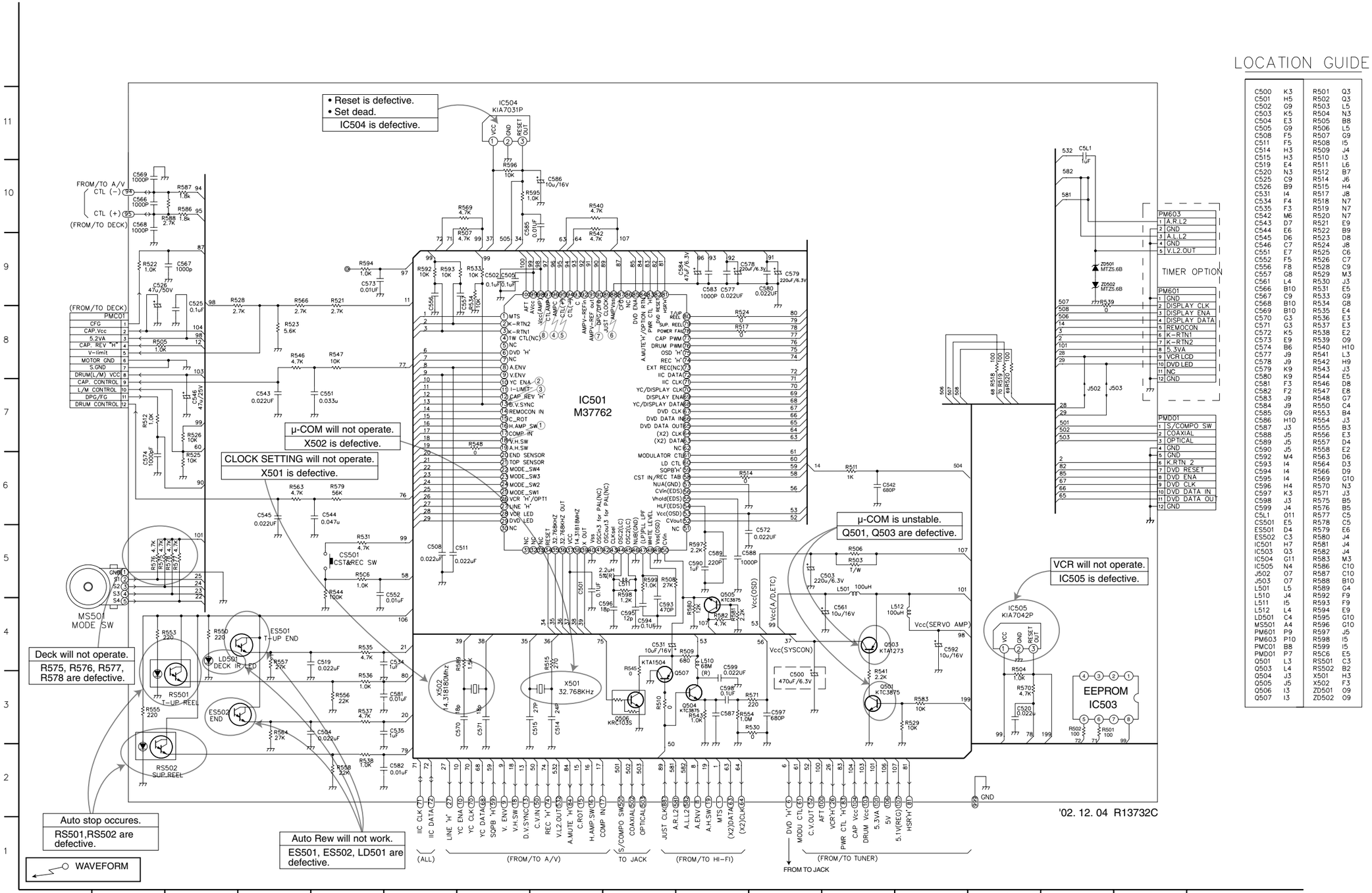
LOCATION GUIDE

C430	I4
C801	F5
C803	E3
C804	E3
C806	F7
C807	F7
C808	F6
C816	I5
C821	F5
C822	G5
C823	G5
C825	H5
C826	H5
C827	I5
C828	I5
C829	J5
C830	J5
C831	J5
C832	K5
C833	K6
C834	K6
C836	K7
C838	K7
C839	K7
C840	K8
C841	K8
C842	K10
C843	K10
C844	J10
C845	J10
C846	J10
C847	J10
C848	I10
C849	I10
C851	F6
C853	F3
C854	F3
C866	F7
C871	E5
C872	N7
C873	H10
C874	H11
C875	H10
C876	H10
C877	H10
C878	G10
C879	G10
C880	G10
C881	G10
C882	F10
C883	F10
C884	F9
C885	F9
C886	F9
C887	F8
C888	F8
C889	F8
D801	L9
D802	I10
IC801	L5
J801	E9
J802	J3
L822	L8
L823	F11
L824	G3
Q805	N8
R801	F5
R802	H4
R804	H4
R805	E7
R806	E7
R807	E7
R808	N7
R809	N7
R810	O7
R811	E8
R812	E7
R813	G3
R814	H3
R817	I5
R818	E8
R821	G5
R822	G5
R823	G4
R835	K6
R836	K7
R837	K7
R838	K7
R839	L7
R840	K8
R842	K9
R843	K9
R844	K9
R845	K10
R851	F6
R856	I5
R857	I5
R858	I5
R866	E7
R867	F7
R874	H10

5. JACK CIRCUIT DIAGRAM



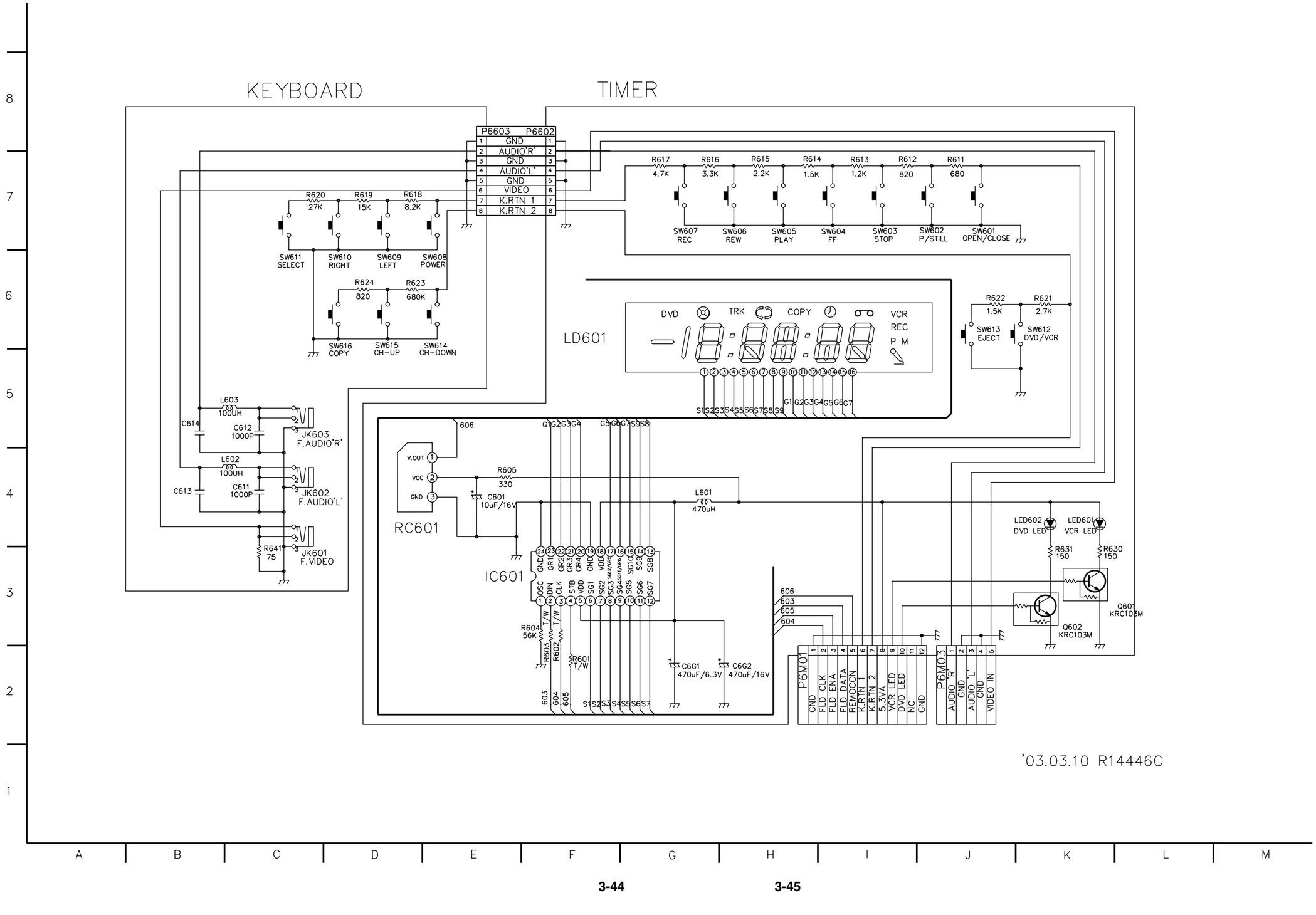
6. SYSTEM CIRCUIT DIAGRAM



LOCATION GUIDE

C500	K3	R501	Q3
C501	H5	R502	Q3
C502	G9	R503	L5
C503	K5	R504	N3
C504	E3	R505	B8
C505	G9	R506	L5
C508	F5	R507	G9
C511	F5	R508	I5
C514	H3	R509	J4
C515	H3	R510	I3
C519	E4	R511	L6
C520	N3	R512	B7
C525	B9	R514	J6
C526	B9	R515	H4
C531	I4	R517	J8
C534	F4	R518	N7
C535	F3	R519	N7
C542	M6	R520	N7
C543	D7	R521	E9
C544	E6	R522	B9
C545	D6	R523	D8
C546	C7	R524	J8
C551	F7	R525	C6
C552	F5	R526	C7
C556	F8	R528	C9
C557	G8	R529	M3
C561	L4	R530	J3
C566	B10	R531	E5
C567	C9	R533	G9
C568	B10	R534	G8
C569	B10	R535	E4
C570	G3	R536	E3
C571	K3	R537	E3
C572	K5	R538	E2
C573	E9	R539	O9
C574	B6	R540	H10
C577	J9	R541	L3
C578	J9	R542	H9
C579	K9	R543	J3
C580	K9	R544	E5
C581	F3	R546	D8
C582	F2	R547	E8
C583	J9	R548	G7
C584	J9	R550	C4
C585	G9	R553	B4
C586	H10	R554	J3
C587	J3	R555	B3
C588	J5	R556	E3
C589	J5	R557	D4
C590	J5	R558	E2
C592	M4	R563	D6
C593	I4	R564	D3
C594	I4	R566	D9
C595	I4	R569	G10
C596	H4	R570	N3
C597	K3	R571	J3
C598	J3	R575	B5
C599	J4	R576	B5
C5L1	O11	R577	C5
CS501	E5	R578	C5
ES501	D4	R579	E6
ES502	C3	R580	J4
IC501	H7	R581	J4
IC503	Q3	R582	J4
IC504	G11	R583	M3
IC505	N4	R586	C10
J502	O7	R587	C10
J503	O7	R588	B10
L501	L5	R589	G4
L510	J4	R592	F9
L511	I5	R593	F9
L512	L4	R594	E9
LD501	C4	R595	G10
MS501	A4	R596	G10
PM601	P9	R597	J5
PM603	P10	R598	I5
PMC01	B8	R599	I5
PMD01	P7	RS06	E5
Q501	L3	RS501	C3
Q503	L4	RS502	B2
Q504	J3	X501	H3
Q505	J5	X502	F3
Q506	I3	ZD501	O9
Q507	I3	ZD502	O9

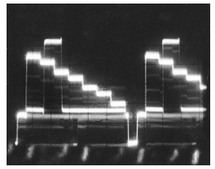
7. TIMER CIRCUIT DIAGRAM



• WAVEFORMS

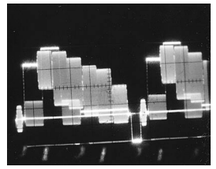
* IC301 Waveform

①



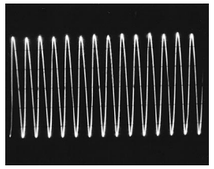
IC301 Pins 20, 21, 22
100mV/10msec DIV
VV/EE
20 Main DE Emphasis Filter
21 Main DE Emphasis out
22 Clamp in

②



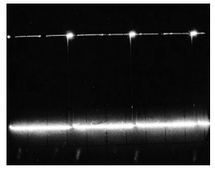
IC301 Pin 32
200mV/10msec DIV
EE
(VIDEO IN)

③



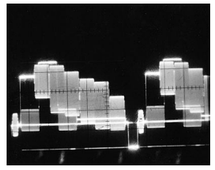
IC301 Pin 41
100mV/0.2msec DIV
REC/PB
(2fsc)

④



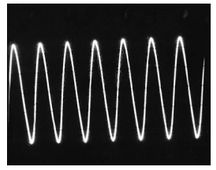
IC301 Pin 25
1.0V/20msec DIV
VV/EE
(C-SYNC OUT)

⑤



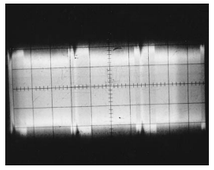
IC301 Pin 26
500mV/10msec DIV
VV/EE
(VIDEO OUT)

⑥



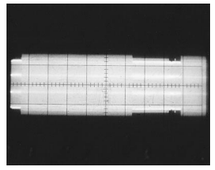
IC301 Pin 49
100mV/0.2msec DIV
PB/REC
(3.58MHz X-TAL IN)

⑦



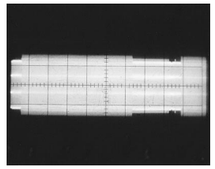
IC301 Pin 14
100mV/5msec DIV
PB
(PB RF out)

⑧



IC301 Pin 73
500mV/2msec DIV
SP REC
(REC RF)

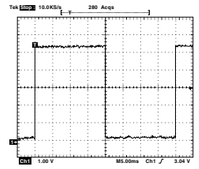
⑨



IC301 Pin 66
500mV/2msec DIV
EP REC
(REC RF)

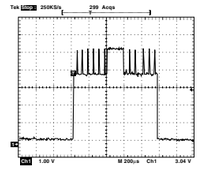
* IC501 Waveform

①



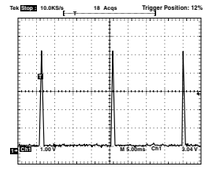
IC501 Pin 18
REC/PB

②



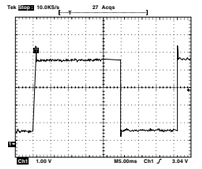
IC501 Pin 13
QUE/REV

③



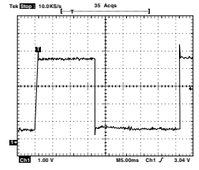
IC501 Pin 13
QUE/REV

④



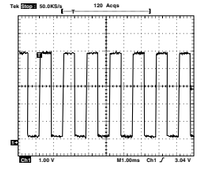
IC501 Pin 95
REC

⑤



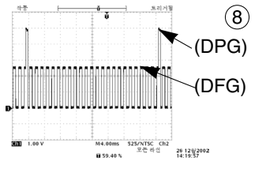
IC501 Pin 94
REC

⑥



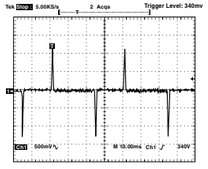
IC501 Pin 87
REC/PB

⑦



IC501 Pin 90
REC/PB
(DPG/DFG)

⑧



IC501 Pin 97
PB
(CTL OUT)

• CIRCUIT VOLTAGE CHART

MODE / PIN NO.	EE	PLAY
IC301		
1	2.3	2.31
2	2.29	2.28
3	2.29	2.28
4	2.29	2.28
5	2.31	2.29
6	2.3	2.31
7	0	2.31
8	2.31	2.32
9	2.31	2.31
10	2.25	2.27
11	4.93	4.93
12	1	1
13	0.97	0.97
14	1.92	1.89
15	1.55	1.53
16	0	0
17	2.37	2.55
18	2.39	1.45
19	0	0
20	2.46	2.49
21	1.73	1.79
22	3.07	2.29
23	4.96	4.95
24	0	0
25	0.36	0.35
26	1.83	1.87
27	1.47	1.6
28	2.25	2.56
29	2.32	2.31
30	2.25	2.26
31	4.08	4.08
32	2.25	2.26
33	3.62	2.8
34	2.97	2.93
35	3.13	3.14
36	2.37	2.37
37	2.35	2.29
38	0	0
39	1.82	1.87
40	0	0
41	0.83	0.83
42	2.34	2.37
43	0	0
44	4.92	4.92
45	4.95	4.95
46	2.27	3.17
47	3.31	3.31
48	3.32	3.32
49	3.94	3.94
50	2.54	2.55
51	2.12	2.09
52	4.95	4.95
53	4.75	4.62
54	4.7	4.52

MODE / PIN NO.	EE	PLAY
55	0.68	0.93
56	0	0
57	0	2.56
58	0	1.61
59	0	2.9
60	4.91	0.94
61	2.92	1.94
62	0	0
63	3.96	3.98
64	1.76	1.72
65	1.84	1.85
66	1.84	1.86
67	1.84	1.86
68	4.93	4.93
69	0.18	0
70	0.15	0
71	0	0
72	1.82	0.71
73	1.82	0.71
74	1.82	0.71
75	0	0
76	2.3	2.3
77	4.96	4.96
78	2.3	2.3
79	0	0
80	2.3	2.3
IC302		
1	2.96	2.96
2	0	0
3	3.01	3
4	5.12	5.12
5	2.95	2.95
6	4.97	4.97
7	2.2	2.2
8	0	0
IC501		
1	0.97	0
2	5.17	5.17
3	5.17	5.16
4	0	0
5	0.5	0.54
6	0	0
7	0.4	0.42
8	0.19	4.06
9	0.29	3.91
10	0.68	0.99
11	0	3.42
12	0	0
13	0	0
14	4.78	4.78
15	0	2.57
16	0	0
17	0.68	0.43
18	2.56	2.57
19	2.57	2.57

MODE / PIN NO.	EE	PLAY
20	0	0
21	0.11	0.11
22	5.17	5.17
23	]5.17	5.17
24	5.17	5.17
25	0	0
26	5.13	5.13
27	5.13	5.17
28	5.13	5.13
29	0	0
30	0	0
31	0	0
32	0	0
33	0	0
34	5.15	5.15
35	1.52	1.51
36	1.43	1.44
37	5.15	5.15
38	2.19	2.18
39	2.28	2.27
40	0	0
41	0.51	0.55
42	0.26	0.55
43	0.26	0
44	2.35	2.34
45	2.41	2.41
46	0	0
47	1.29	0
48	0	0
49	0	0
50	1.88	1.99
51	0.53	0.57
52	1.88	1.98
53	4.96	4.95
54	2.03	2.03
55	2.6	1.92
56	1.96	2.05
57	0	0
58	0	0
59	0	0
60	2.57	2.58
61	0	4.28
62	0	0
63	0	0
64	0	0
65	0.97	0.86
66	2.38	0
67	5.07	5.07
68	4.7	4.45
69	5.02	4.97
70	4.75	4.61
71	5.17	5.17
72	5.17	5.17
73	0	0
74	0	0

MODE / PIN NO.	EE	PLAY
75	0	0
76	0	1.79
77	0	2.72
78	0	4.76
79	0	0
80	0	0
81	0	0
82	4.94	4.94
83	5.03	4.98
84	0	0
85	2.69	2.67
86	0.58	0.68
87	0.17	2.36
88	0	0
89	0.54	0
90	0.1	1.36
91	2.53	2.54
92	2.54	2.53
93	0.21	0
94	2.5	2.49
95	2.5	2.49
96	2.52	2.52
97	2.52	2.52
98	5.08	5.08
99	5.17	5.17
100	2.64	1.95
IC504		
1	5.19	5.19
2	0	0
3	5.14	5.14
IC505		
1	5.19	5.19
2	0	0
3	4.7	4.7
IC601		
1	1.93	1.93
2	2.01	2.01
3	5.05	5.05
4	1.7	1.7
5	0	0
6	5.05	5.05
IC602		
1	2.51	2
2	0	0
3	2.27	2.35
4	0	0
5	0	0
6	5.06	5.06
7	2.53	2.04
8	0	0
IC801		
1	0	0
2	2.56	2.54
3	9.21	9.18
4	2.48	2.48

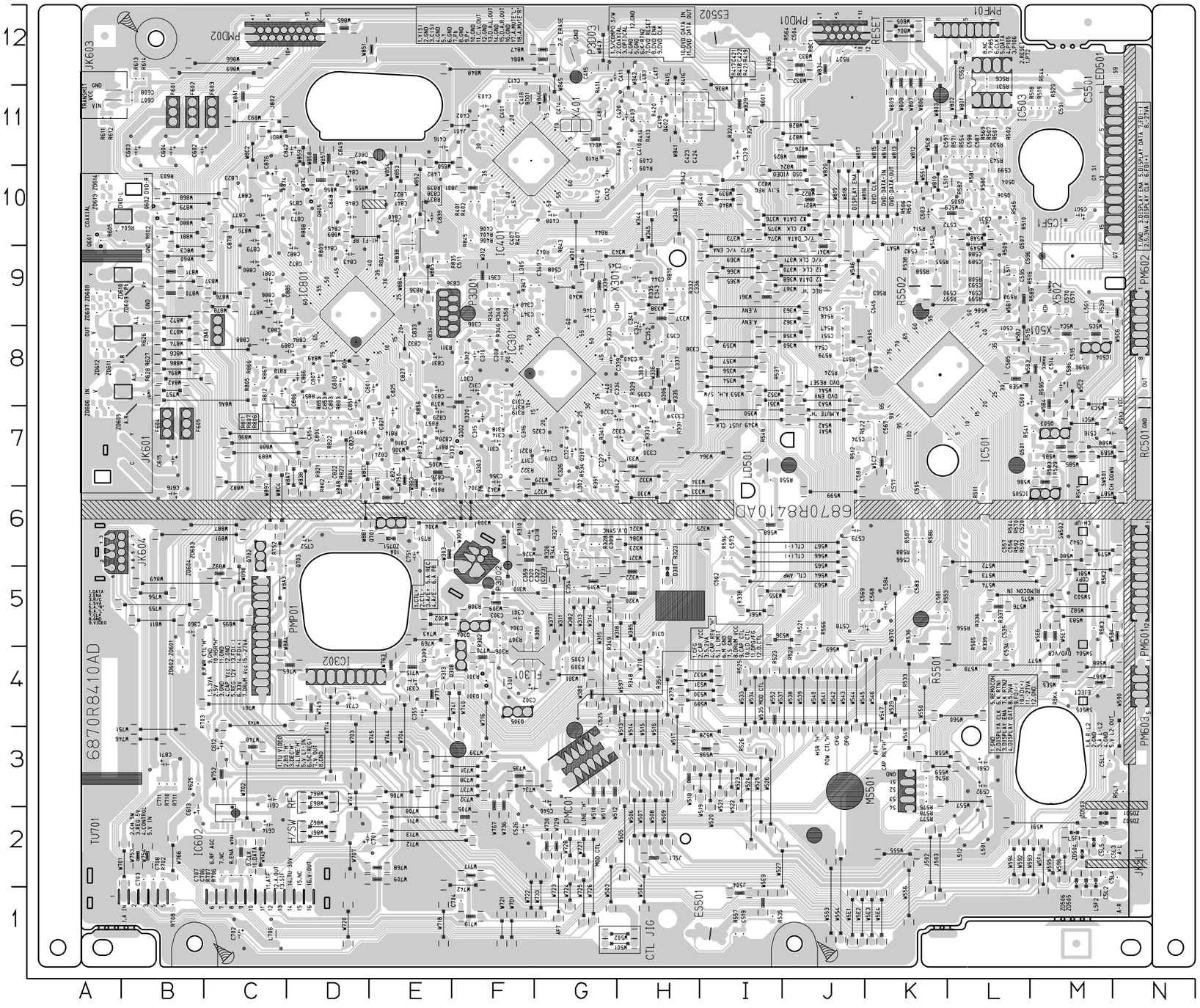
MODE / PIN NO.	EE	PLAY
5	5.19	5.19
6	1.91	2.07
7	0	0
8	0.29	1.31
9	0	0
10	0	0
11	0	0
12	2.5	2.5
13	1.91	2.44
14	2.49	2.49
15	5.06	5.05
16	2.51	2.51
17	0	0
18	0	0.86
19	2.51	2.44
20	2.52	2.45
21	2.52	2.43
22	2.51	2.42
23	0.19	3.66
24	2.25	2.3
25	0	0
26	2.24	2.3
27	2.25	2.3
28	0	0
29	2.48	0.11
30	0	1.34
31	2.51	3.79
32	5.02	5.01
33	2.64	2.65
34	2.64	2.64
35	0	0
36	5.06	5.05
37	5.17	5.05
38	5.17	5.17
39	0	2.57
40	0.19	0
41	2.52	2.45
42	2.51	2.43
43	2.52	2.45
44	2.52	2.45
45	0	0.25
46	5.06	5.05
47	2.49	2.49
48	1.9	2.42
49	0	0
50	0	0
51	2.05	2.06
52	1.22	0
53	3.86	0.25
54	9.2	9.19
55	6.26	0.28
56	1.96	0.29
57	2.2	2.15
58	4.56	0
59	2.52	2.35

MODE / PIN NO.	EE	PLAY
60	3.86	0.23
61	3.15	0.24
62	4.02	0
63	3.83	0
64	2.45	0
65	3.87	0.32
66	4.09	0.32
67	3.88	0.31
68	3.94	0.31
69	0	0
70	0	0
71	0	0
72	3.86	0.31
73	0	0
74	2.5	2.5
75	3.87	0.4
76	3.17	0.22
77	0	0
78	4.42	4.3
79	0	0
80	4.4	4.3
SW601		
1	5.06	5.07
2	5.06	5.07
3	0	0
4	0.1	0.73
5	0.1	0.73
6	0.13	0
7	0	0.26
8	0.76	0.77
9	0.76	0.76
10	0	0
11	0	0
12	0	0

Location No.	Base		Emitter		Collector	
	EE	PB	EE	PB	EE	PB
Q301	4.26	4.26	4.97	4.96	4.907	4.91
Q302	0.758	1.74	0	0	0	0
Q303	0.734	0.72	0	0	0	0
Q304	0	0	0	0	0	0
Q305	4.92	4.92	4.94	4.93	0	0
Q306	1.828	1.86	2.45	2.5	0	0
Q307	1.843	2.05	2.51	2.62	0	0
Q308	5.19	5.19	4.87	4.91	4.93	4.92
Q309	0	0	0	0	4.91	4.97
Q501	0.68	0.68	0	0	0	0
Q503	5.17	5.17	4.48	4.48	5.15	5.15
Q504	2.82	2.94	2.18	2.27	4.95	4.95
Q505	1.58	1.58	1.03	2.24	4.96	4.96
Q506	5.07	0	0	0	0	3.29
Q507	2.8	2.6	0	3.23	0	0
Q805	2.56	2.56	2.08	2.08	5.06	5.05
Q701	9.02	9.24	9.82	9.81	12.58	12.99
Q702	4.98	4.97	5.7	5.7	5.19	5.19
Q601	0.75	0.75	0	0	0	0
Q602	0.75	0.75	0	0	0	0

PRINTED CIRCUIT DIAGRAMS

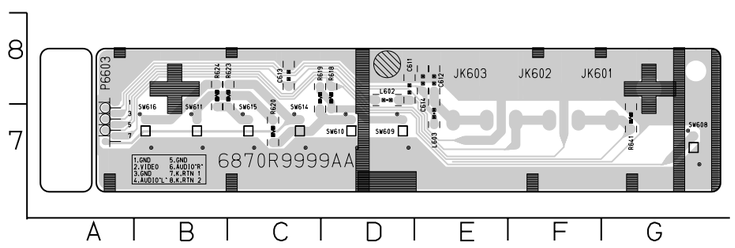
1. VCR P.C.BOARD



LOCATION GUIDE

BD01	F11	C731	D4	JK603	A11
C301	F5	C751	E6	JK604	A6
C302	F4	C752	D6	L301	F4
C308	F8	C801	E8	L302	G6
C310	F8	C806	C8	L303	H8
C311	F7	C807	D8	L304	G9
C312	F8	C808	D8	L305	F9
C315	F7	C816	E7	L481	G11
C318	F6	C821	E7	L482	F10
C319	G7	C824	E7	L483	H12
C324	G7	C825	E7	L501	L2
C325	G7	C826	E7	L510	L10
C327	G7	C828	E7	L511	L9
C328	H7	C829	E7	L512	L2
C329	I11	C830	E8	L5F1	M2
C330	H7	C831	E8	L5F2	M2
C331	E4	C833	E9	L5G1	M9
C332	H7	C839	E10	L706	C1
C333	H7	C840	E10	L822	E10
C334	G8	C842	D11	L823	C10
C335	H7	C843	D9	L824	E7
C339	G8	C846	D10	LD501	I7
C340	H8	C847	D10	LED501	N11
C342	H8	C851	D8	M5501	K3
C344	H9	C866	D8	P3D01	E8
C346	G9	C871	B3	P3D02	F6
C350	F9	C873	D10	P3D03	G12
C352	H8	C876	C10	PM601	N6
C355	E4	C877	C10	PM602	N9
C356	F7	C879	C10	PM603	N4
C360	B5	C880	C9	PMC01	G3
C403	F11	C881	C9	PMD01	J12
C408	G10	C882	D9	PMD02	C12
C411	G12	C883	C9	PMF01	L12
C412	G10	C886	C9	PMP01	C5
C416	E11	C887	C10	Q304	F5
C419	H11	C888	C8	Q305	F4
C420	H11	C889	D8	Q308	F4
C500	M8	C5501	M11	Q503	M7
C503	K10	D301	H5	Q701	E6
C516	M7	D802	D11	Q702	C6
C526	F2	ES501	H1	RC501	N8
C531	L10	ES502	I12	RS501	K5
C546	G3	F601	B11	RS502	K9
C561	L3	F602	B11	SW501	M7
C578	J5	F603	C11	SW502	M6
C579	J6	F604	B7	SW503	M5
C584	K5	F605	B7	SW504	M5
C586	M8	F8A1	C8	SW505	M4
C592	L3	FL301	F4	TU701	A1
C5G1	M10	IC302	D4	X301	H9
C602	B11	IC503	L12	X401	G11
C603	B11	IC504	M8	X501	M8
C604	B11	IC505	M6	X502	M9
C611	C3	J401	F11	ZD501	M2
C612	C3	J502	K2	ZD502	M2
C613	B2	J503	K2	ZD503	M2
C614	C2	J504	I1	ZD504	M2
C615	B7	J5L1	H2	ZD505	M2
C616	B6	J801	F10	ZD506	M2
C701	D2	JK5L1	N3	ZD751	E6
C702	C1	JK601	B8		

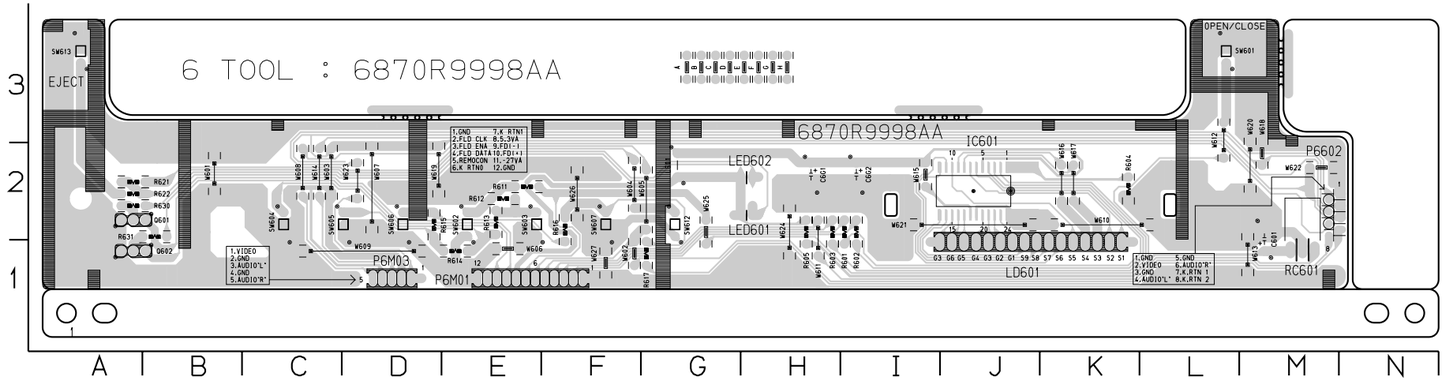
2. KEY 1(LEFT) P.C.BOARD



LOCATION GUIDE

C611	D8	R620	C7
C612	E8	R623	C8
C613	C8	R624	B8
C614	E8	R641	G7
JK601	F7	SW608	G7
JK602	F7	SW609	D7
JK603	E7	SW610	D7
L602	D8	SW611	B7
L603	E7	SW614	C7
P6603	A8	SW615	C7
R618	D8	SW616	B7
R619	C8		

3. KEY 2(RIGHT) P.C.BOARD

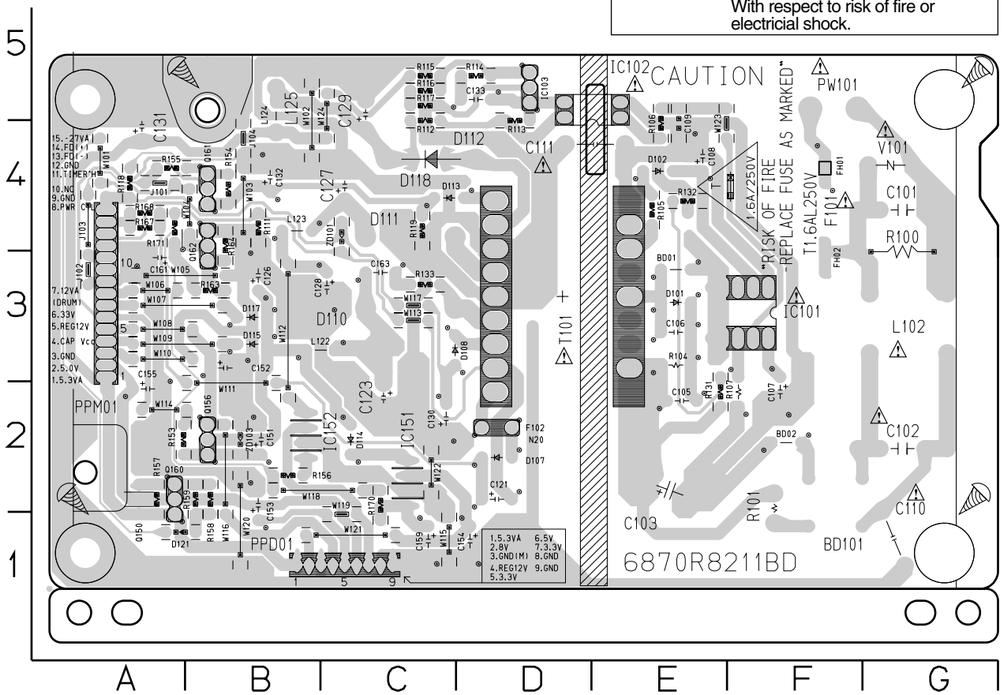


LOCATION GUIDE

C601	M2	R613	E2
C6G1	H2	R614	E1
C6G2	I2	R615	D2
L601	G2	R616	F2
LD601	K1	R617	G1
LED601	H2	R621	A2
LED602	H2	R622	A2
P6602	M2	R630	A2
P6M01	F1	R631	B2
P6M03	D1	RC601	M2
Q601	A2	SW601	L3
Q602	A1	SW602	E2
R601	I2	SW603	E2
R602	I2	SW604	C2
R603	H2	SW605	D2
R604	K2	SW606	D2
R605	H2	SW607	F2
R611	E2	SW612	G2
R612	E2	SW613	A3

4. POWER P.C.BOARD

NOTES) ⚠ Warning
Parts that are shaded are critical
With respect to risk of fire or
electricial shock.

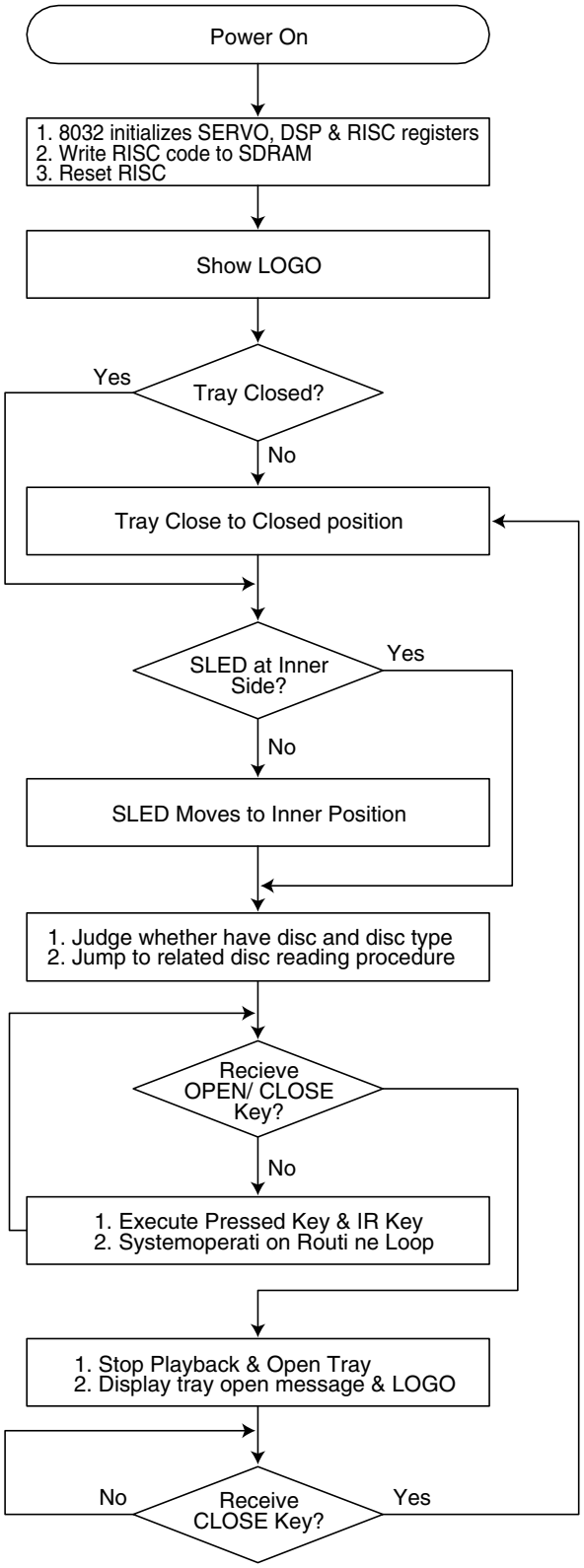


LOCATION GUIDE

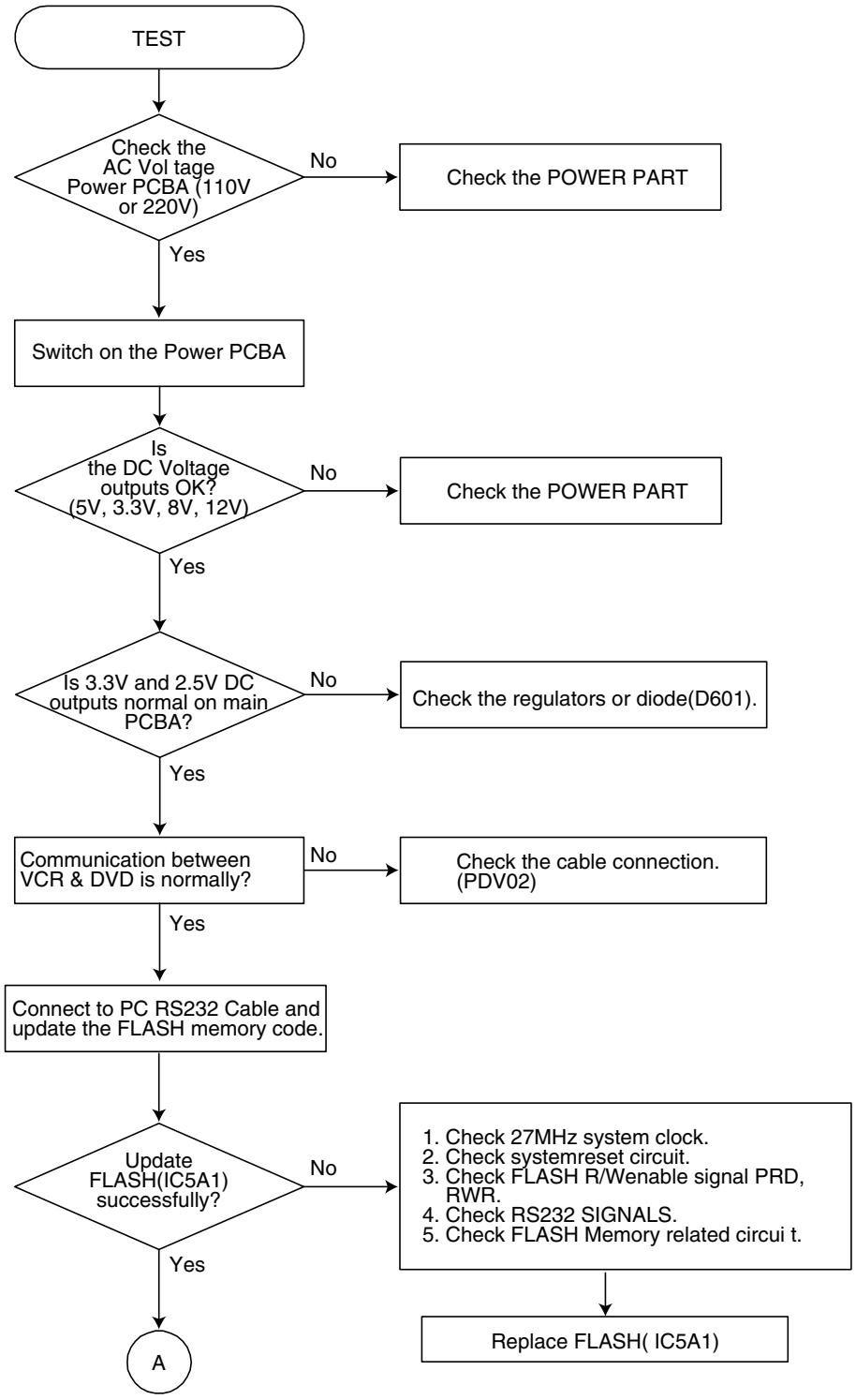
BD01	E3	J101	A4
BD02	F2	J102	A3
BD101	F2	J103	A4
C101	G4	J104	B4
C102	G2	L102	G3
C103	E2	L122	C3
C105	E2	L123	B4
C106	E3	L124	B5
C107	F2	L125	B5
C108	E4	PPD01	B1
C109	E4	PPM01	A3
C110	G1	PW101	F5
C111	E4	Q150	A2
C121	D2	Q156	B2
C123	C2	Q160	A2
C126	B3	Q161	B4
C127	C4	Q162	B4
C128	C3	R100	G3
C129	C5	R101	F2
C130	C2	R104	E3
C131	A4	R105	E4
C132	B4	R106	E4
C133	D5	R107	F2
C151	B2	R111	B4
C152	B3	R112	C4
C153	B2	R113	D4
C154	D1	R114	D5
C155	A2	R115	C5
C159	C1	R116	C5
C161	A3	R117	C5
C163	C3	R118	A4
D101	E3	R119	C4
D102	E4	R131	E2
D107	D2	R132	E4
D108	C3	R133	C3
D110	C3	R153	A2
D111	C4	R154	B4
D112	C4	R155	A4
D113	C4	R156	B2
D114	C2	R157	A2
D115	B3	R158	B2
D117	B3	R159	B2
D118	C4	R163	B3
D121	A1	R164	B4
F102	D2	R167	A4
FH01	F4	R168	A4
FH02	F3	R170	C2
IC101	F3	R171	A4
IC102	D5	T101	D3
IC103	D5	V101	G4
IC151	C2	ZD101	C4
IC152	B2	ZD103	B2

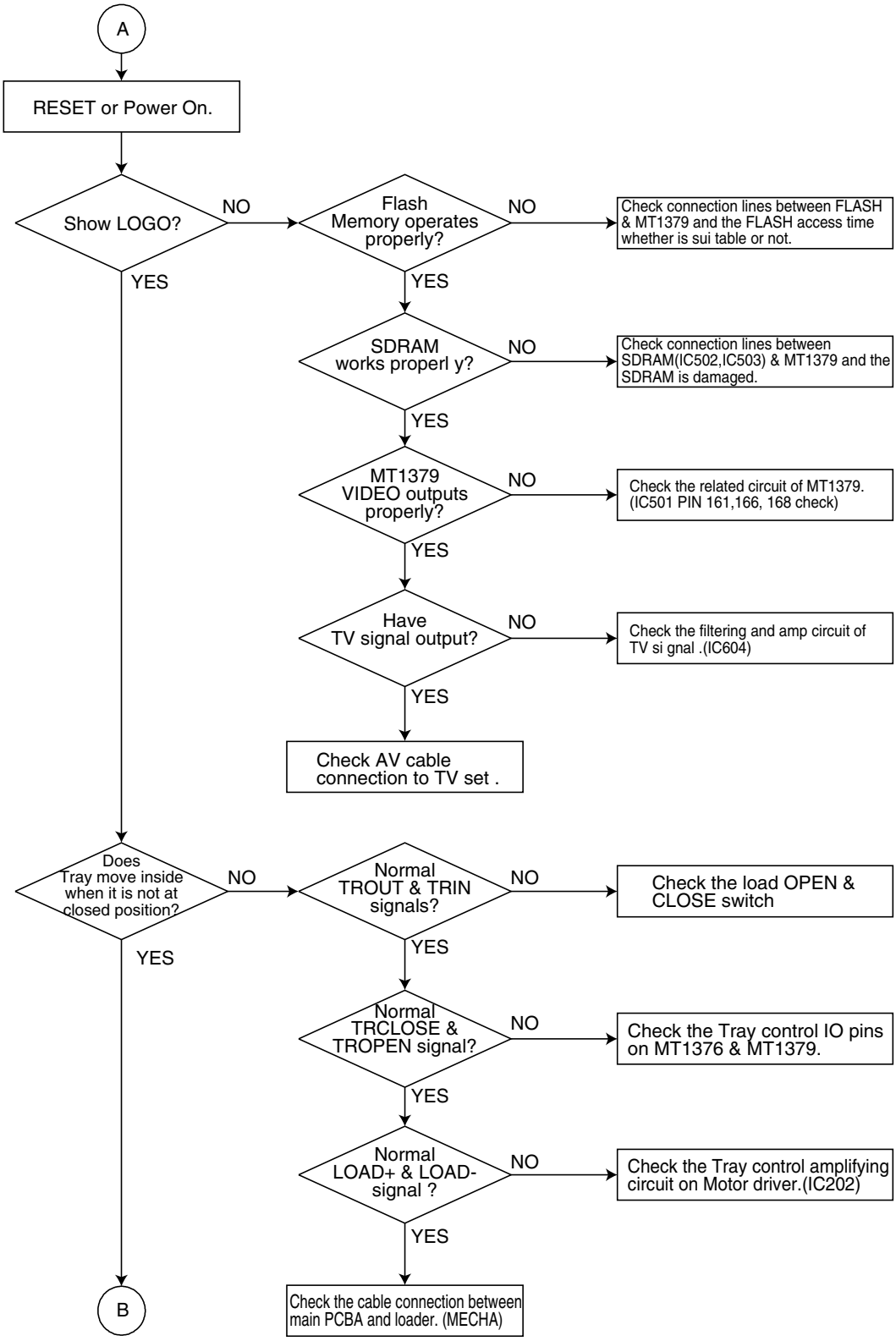
DVD SECTION
ELECTRICAL TROUBLESHOOTING GUIDE

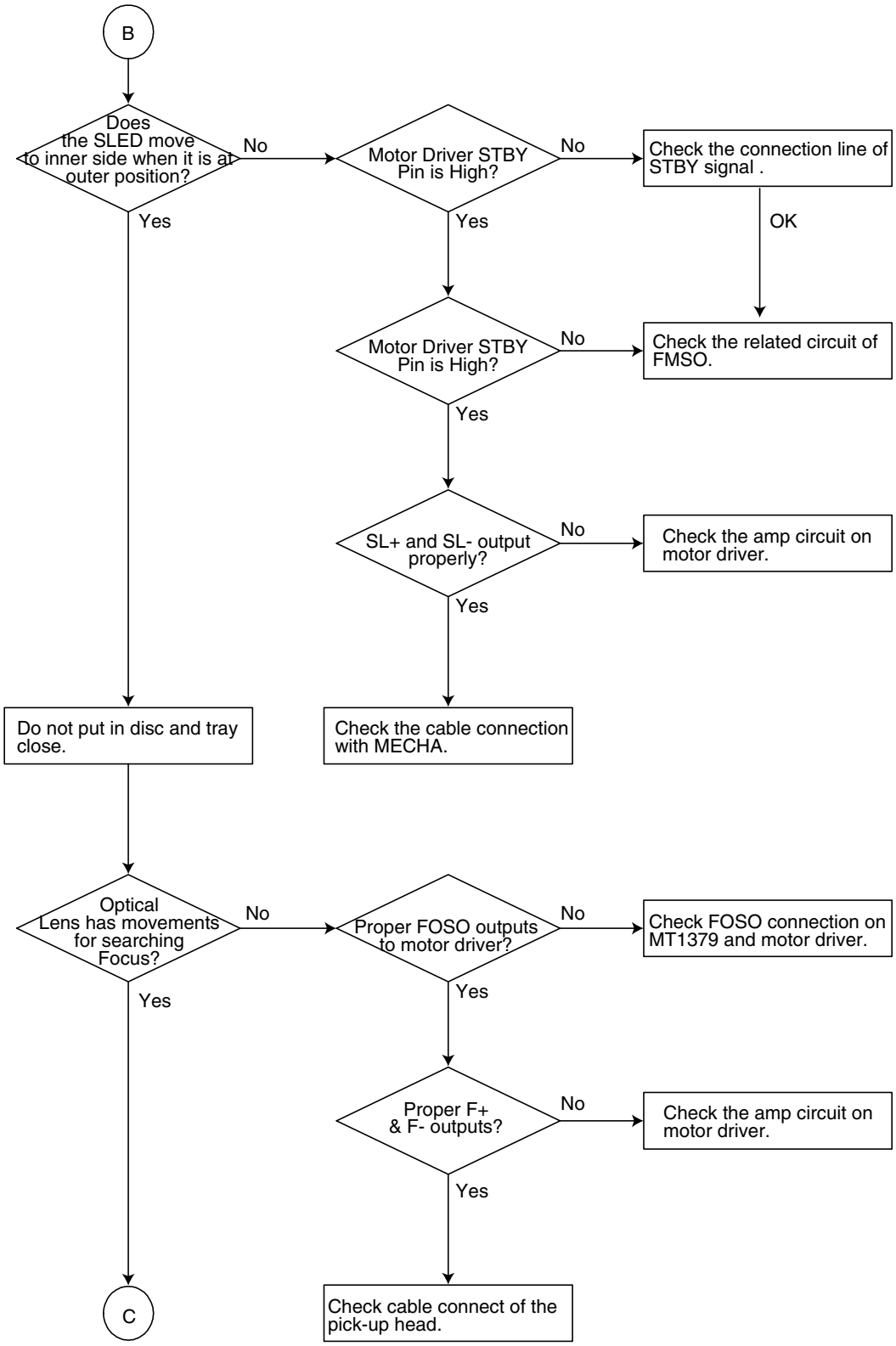
1. System operation flow

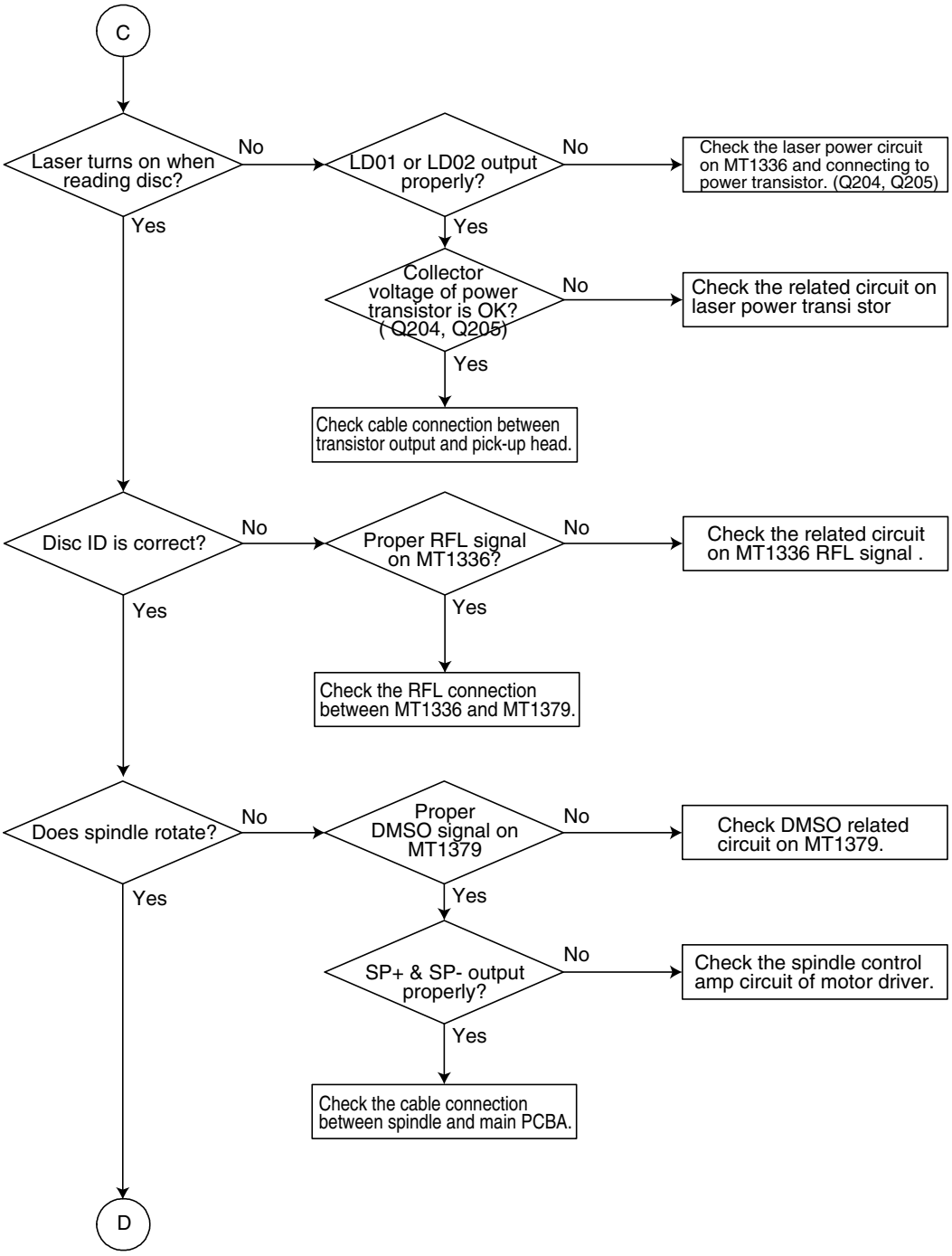


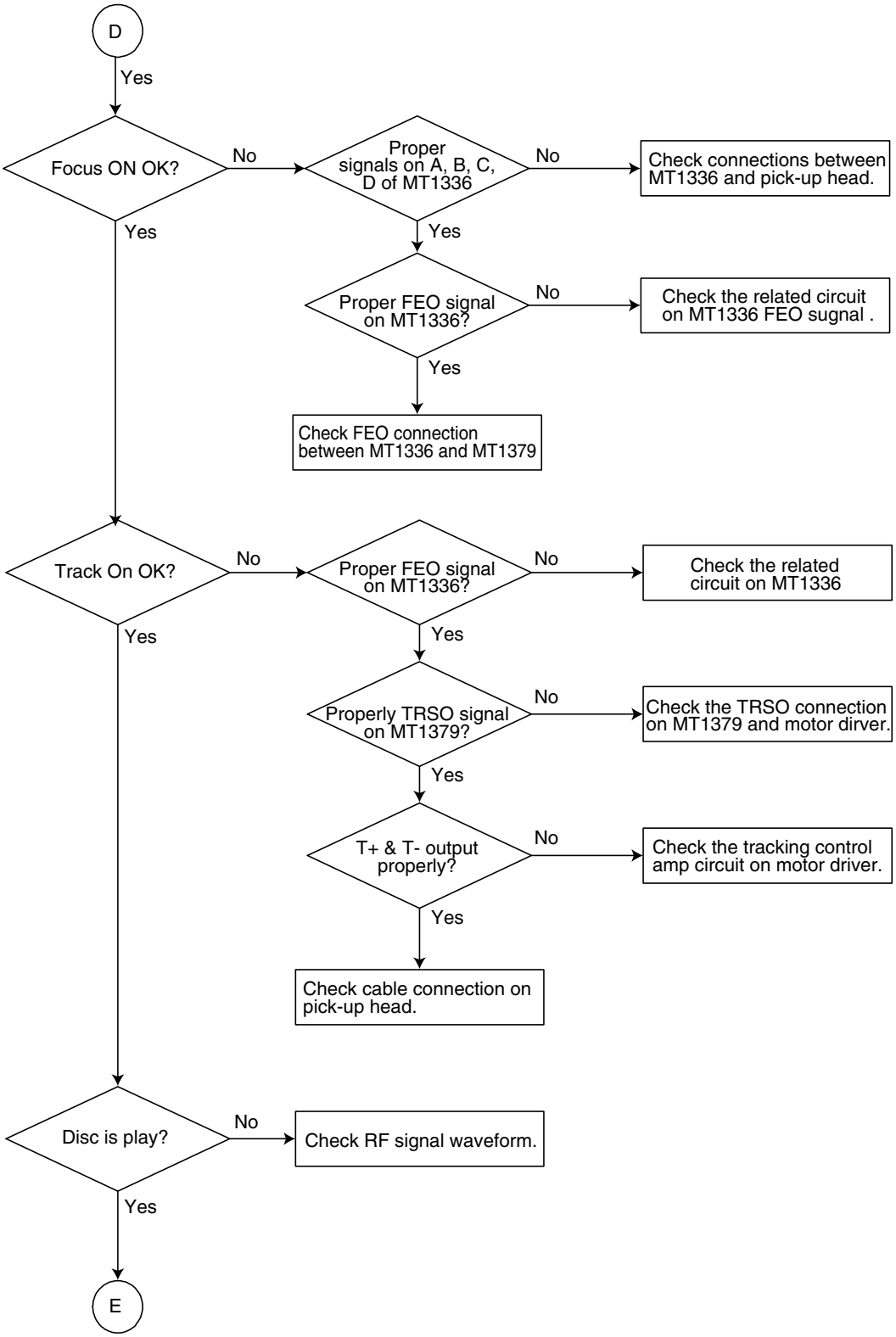
2. Test & debug flow

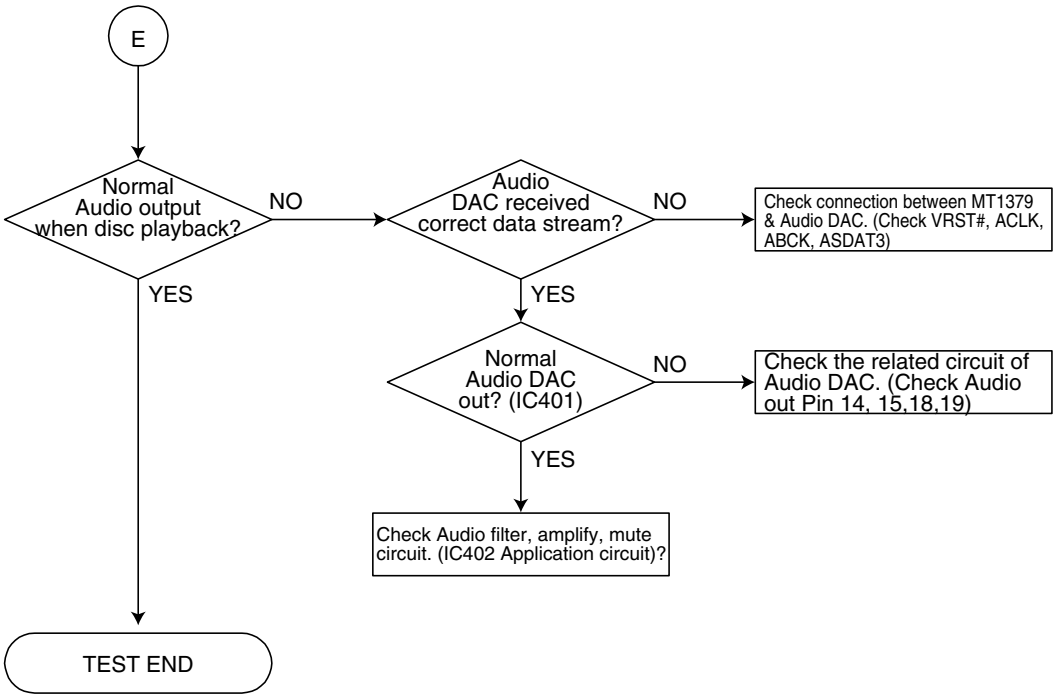

TEST
Check the AC Vol tage Power PCBA (110V or 220V)
No
Check the POWER PART
Yes
Switch on the Power PCBA
Is the DC Voltage outputs OK? (5V, 3.3V, 8V, 12V)
No
Check the POWER PART
Yes
Is 3.3V and 2.5V DC outputs normal on main PCBA?
No
Check the regulators or diode(D601).
Yes
Communication between VCR & DVD is normally?
No
Check the cable connection. (PDV02)
Yes
Connect to PC RS232 Cable and update the FLASH memory code.
Update FLASH(IC5A1) successfully?
No
1. Check 27MHz system clock.
2. Check systemreset circuit.
3. Check FLASH R/Wenable signal PRD, RWR.
4. Check RS232 SIGNALS.
5. Check FLASH Memory related circui t.
Replace FLASH(IC5A1)
Yes
A


A
RESET or Power On.
Show LOGO?
NO
YES
Flash Memory operates properly?
NO
Check connection lines between FLASH & MT1379 and the FLASH access time whether is sui table or not.
YES
SDRAM works properl y?
NO
Check connection lines between SDRAM(IC502,IC503) & MT1379 and the SDRAM is damaged.
YES
MT1379 VIDEO outputs properly?
NO
Check the related circuit of MT1379. (IC501 PIN 161,166, 168 check)
YES
Have TV signal output?
NO
Check the filtering and amp circuit of TV si gnal .(IC604)
YES
Check AV cable connection to TV set .
Does Tray move inside when it is not at closed position?
NO
YES
Normal TROUT & TRIN signals?
NO
Check the load OPEN & CLOSE switch
YES
Normal TRCLOSE & TROPEN signal?
NO
Check the Tray control IO pins on MT1376 & MT1379.
YES
Normal LOAD+ & LOAD- signal ?
NO
Check the Tray control amplifying circuit on Motor driver.(IC202)
YES
Check the cable connection between main PCBA and loader. (MECHA)
B


B
Does the SLED move to inner side when it is at outer position?
No
Yes
Motor Driver STBY Pin is High?
No
Yes
Check the connection line of STBY signal .
OK
Motor Driver STBY Pin is High?
No
Yes
Check the related circuit of FMSO.
SL+ and SL- output properly?
No
Yes
Check the amp circuit on motor driver.
Do not put in disc and tray close.
Check the cable connection with MECHA.
Optical Lens has movements for searching Focus?
No
Yes
Proper FOSO outputs to motor driver?
No
Yes
Check FOSO connection on MT1379 and motor driver.
Proper F+ & F- outputs?
No
Yes
Check the amp circuit on motor driver.
C
Check cable connect of the pick-up head.


C
Laser turns on when reading disc?
No
LD01 or LD02 output properly?
No
Check the laser power circuit on MT1336 and connecting to power transistor. (Q204, Q205)
Yes
Yes
Collector voltage of power transistor is OK? (Q204, Q205)
No
Check the related circuit on laser power transi stor
Yes
Check cable connection between transistor output and pick-up head.
Disc ID is correct?
No
Proper RFL signal on MT1336?
No
Check the related circuit on MT1336 RFL signal .
Yes
Yes
Check the RFL connection between MT1336 and MT1379.
Does spindle rotate?
No
Proper DMSO signal on MT1379
No
Check DMSO related circuit on MT1379.
Yes
Yes
SP+ & SP- output properly?
No
Check the spindle control amp circuit of motor driver.
Yes
Check the cable connection between spindle and main PCBA.
D


D
Yes
Focus ON OK?
No
Proper signals on A, B, C, D of MT1336
No
Check connections between MT1336 and pick-up head.
Yes
Yes
Proper FEO signal on MT1336?
No
Check the related circuit on MT1336 FEO sugnal .
Yes
Check FEO connection between MT1336 and MT1379
Track On OK?
No
Proper FEO signal on MT1336?
No
Check the related circuit on MT1336
Yes
Yes
Properly TRSO signal on MT1379?
No
Check the TRSO connection on MT1379 and motor dirver.
Yes
T+ & T- output properly?
No
Check the tracking control amp circuit on motor driver.
Yes
Check cable connection on pick-up head.
Disc is play?
No
Check RF signal waveform.
Yes
E


E
Normal Audio output when disc playback?
NO
Audio DAC received correct data stream?
NO
Check connection between MT1379 & Audio DAC. (Check VRST#, ACLK, ABCK, ASDAT3)
YES
YES
Normal Audio DAC out? (IC401)
NO
Check the related circuit of Audio DAC. (Check Audio out Pin 14, 15,18,19)
YES
Check Audio filter, amplify, mute circuit. (IC402 Application circuit)?
TEST END

DETAILS AND WAVEFORMS ON SYSTEM TEST AND DEBUGGING

1. SYSTEM 27MHz CLOCK,RESET,FLASH R/W SIGNAL

1) MT1379 main clock is at 27MHz(X501)

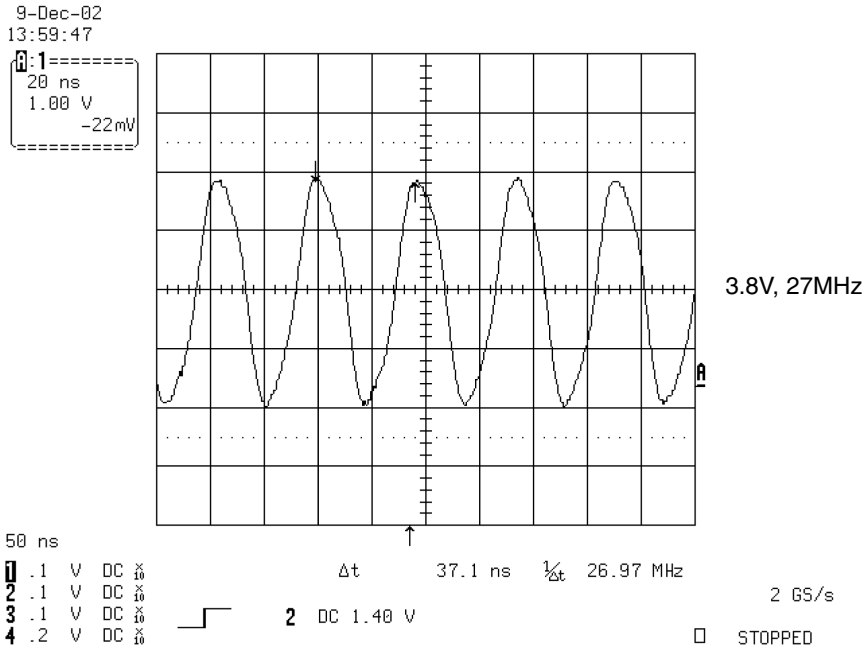


FIG 1-1

2) MT1379 & MT1336 reset is high active.

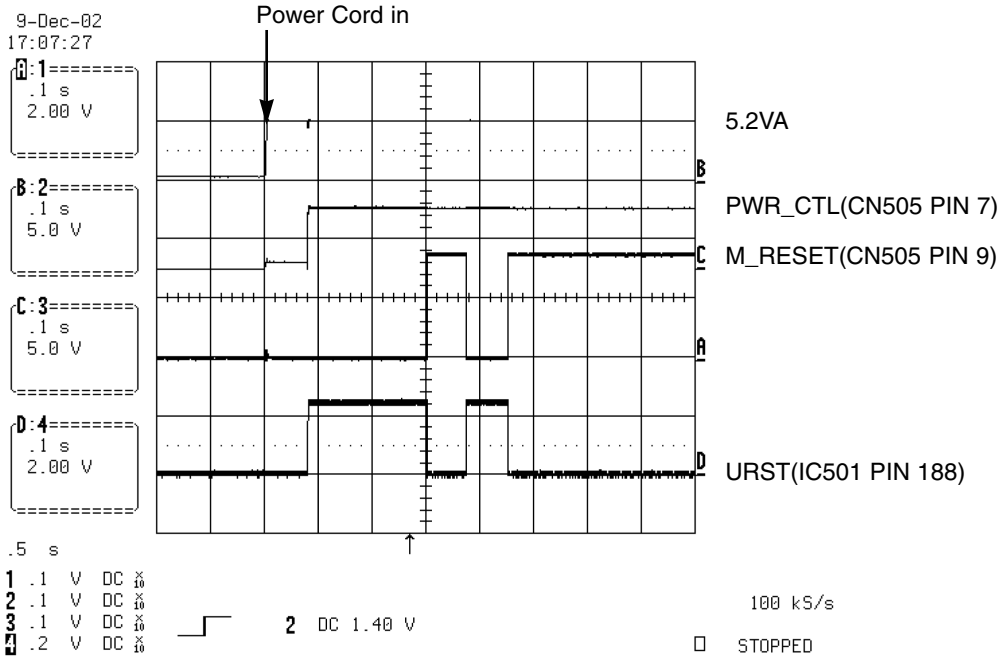


FIG 1-2

3) RS232 waveform during procedure(Downloading)

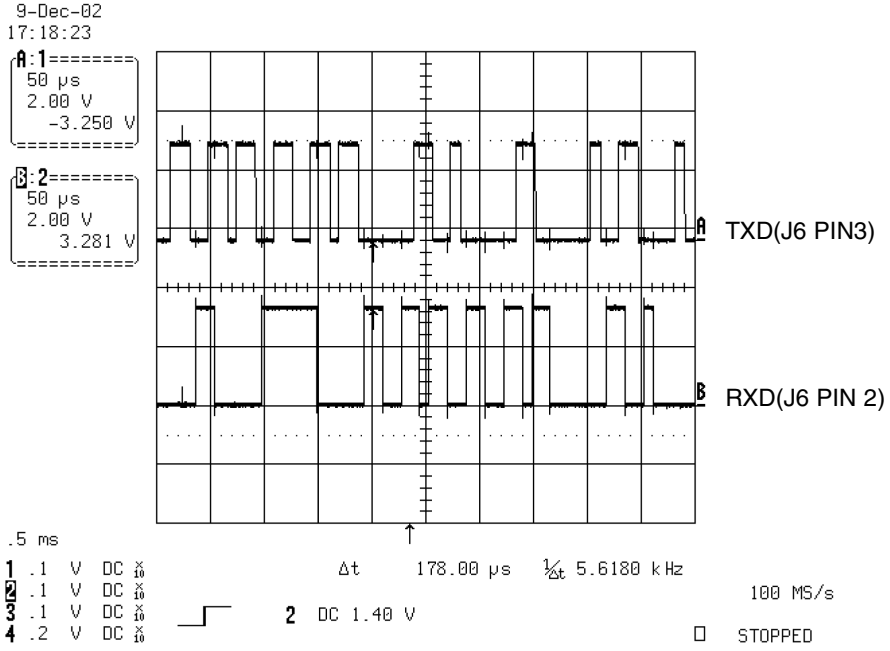


FIG 1-3

4) Flash R/W enable signal during download(Downloading)

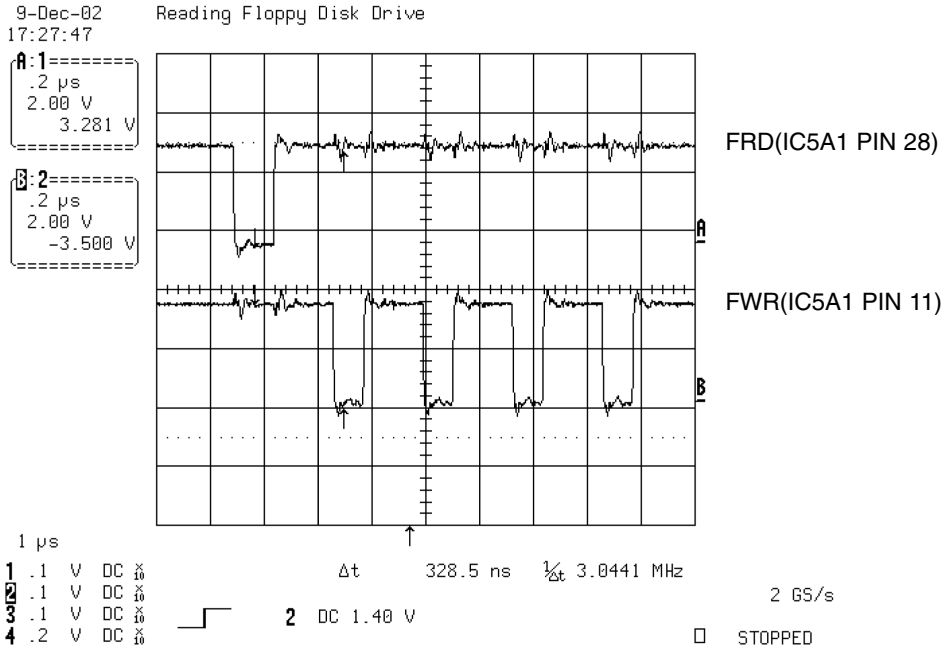


FIG 1-4

2. SDRAM CLOCK

1) MT1379 main clock is at 27MHz(X501)

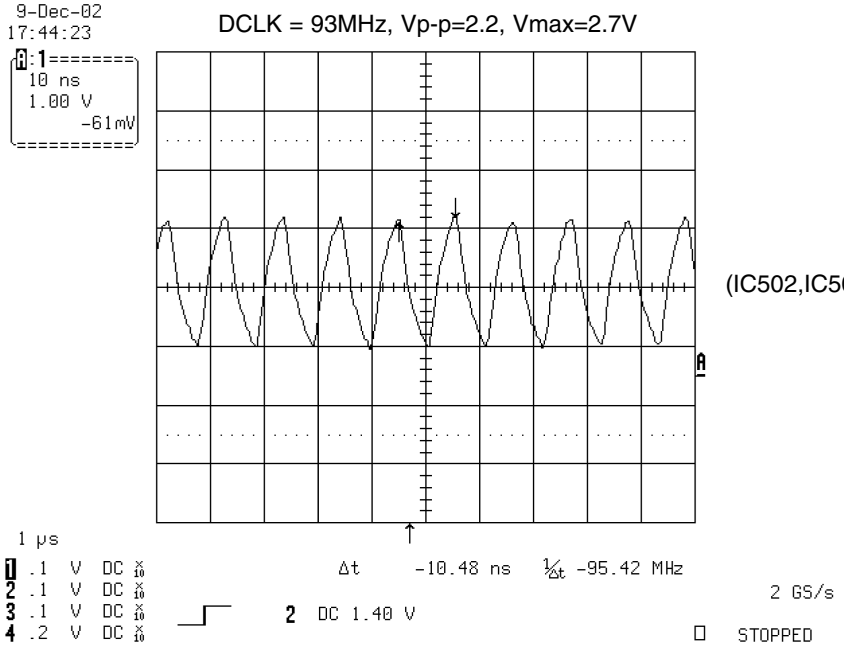


FIG 2-1

3. TRAY OPEN/CLOSE SIGNAL

1) Tray open/close waveform

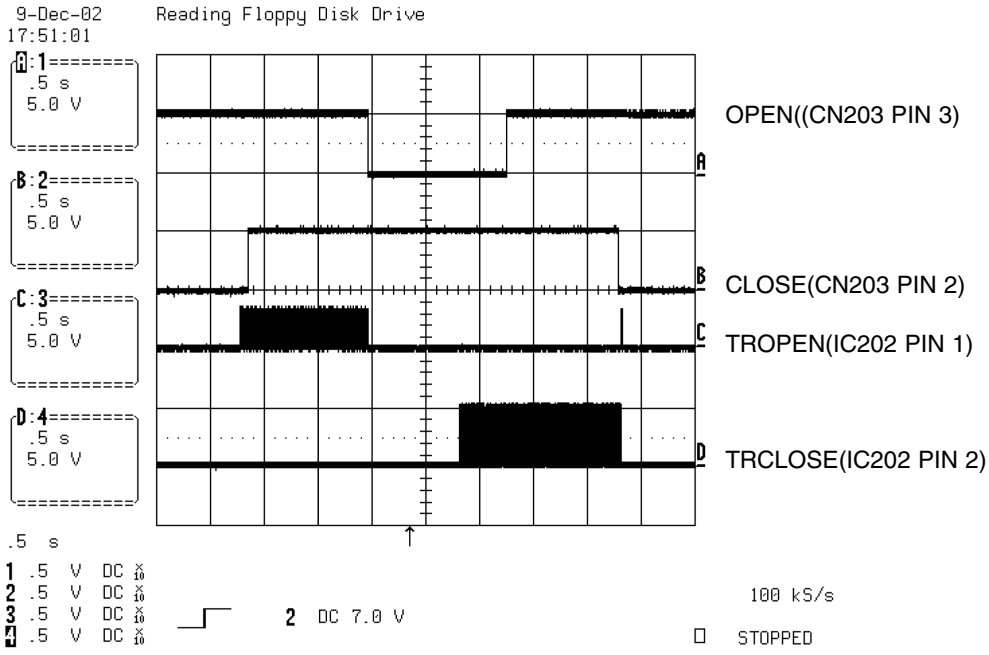


FIG 3-1

2) Tray close waveform

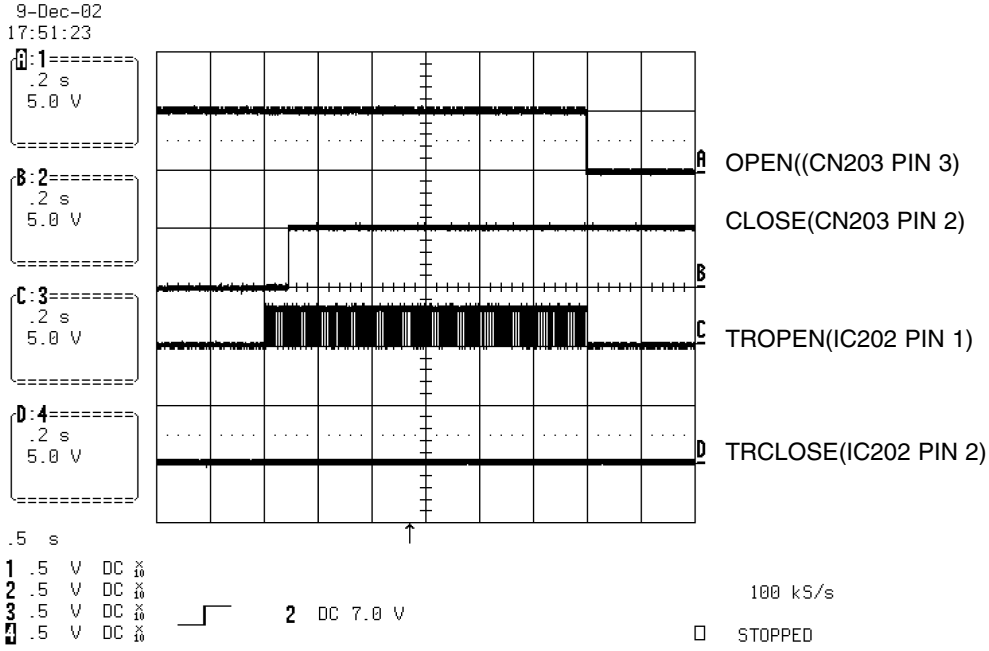


FIG 3-2

3) Tray open waveform

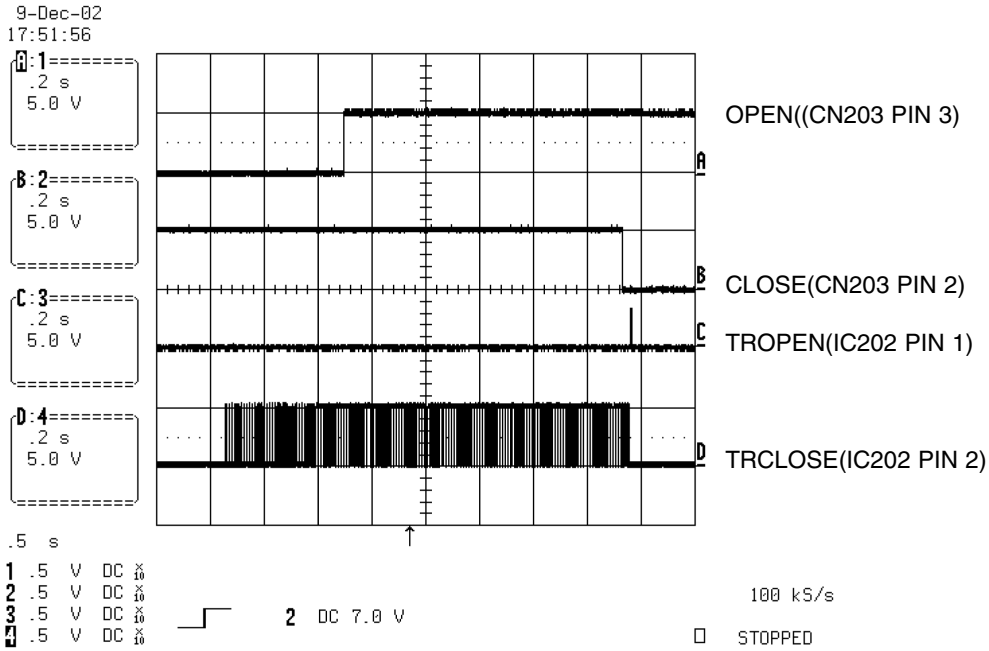


FIG 3-3

4. SLED CONTROL RELATED SIGNAL (NO DISC CONDITION)

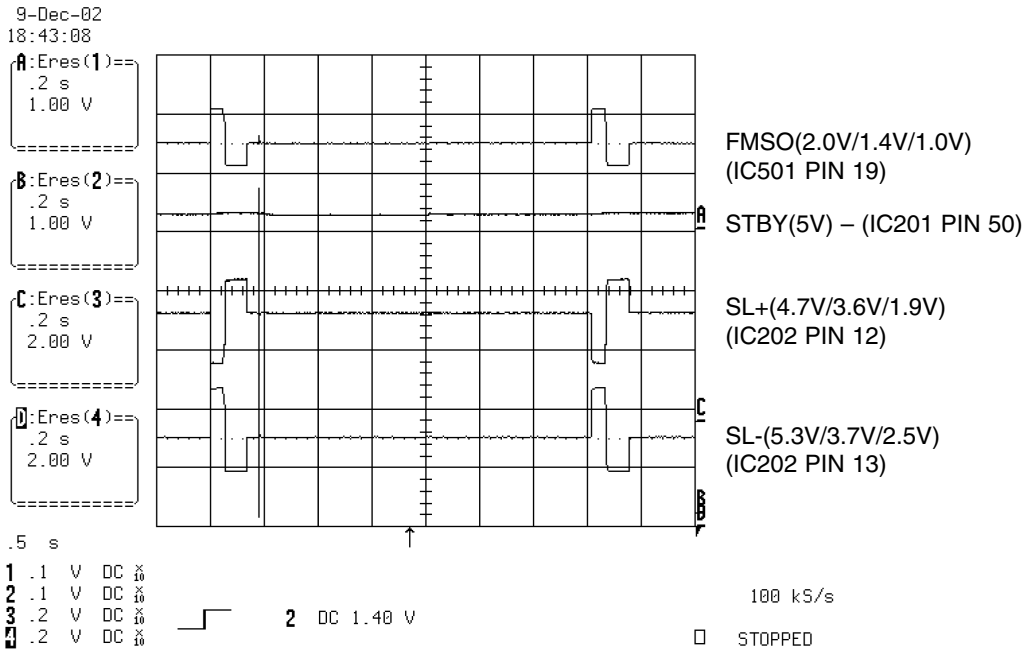


FIG 4-1

5. LENS CONTROL RELATED SIGNAL(NO DISC CONDITION)

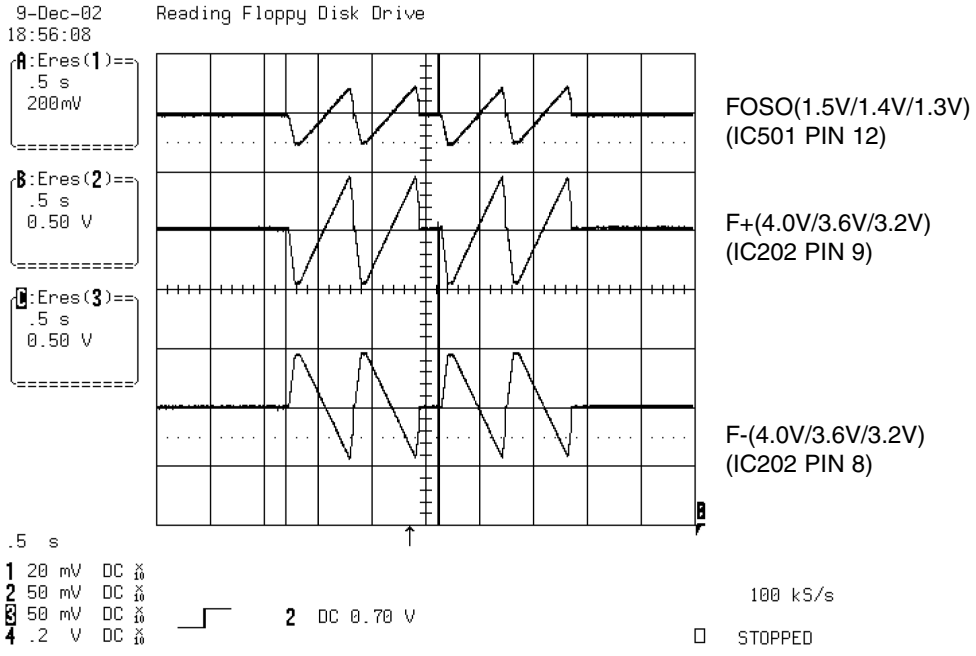


FIG 5-1

6. LASER POWER CONTROL RELATED SIGNAL(NO DISC CONDITION)

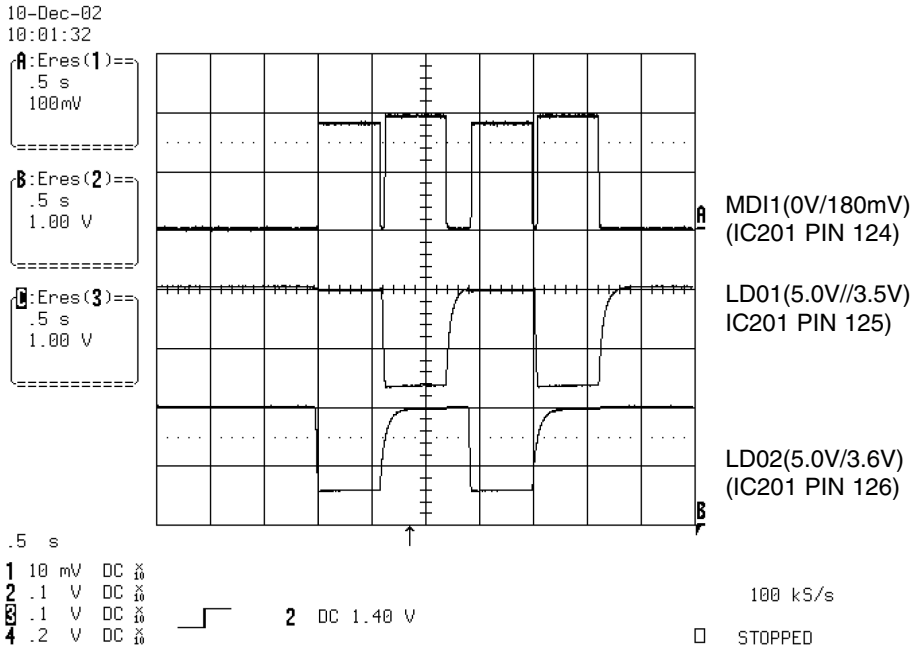


FIG 6-1

7. DISC TYPE JUDGEMENT WAVEFORMS

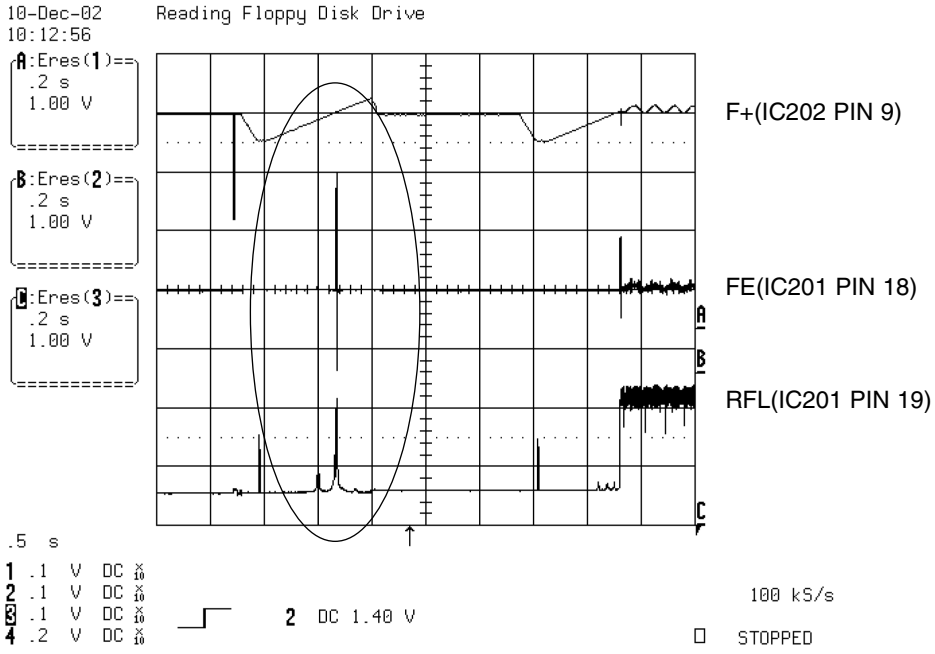


FIG 7-1 (DVD)

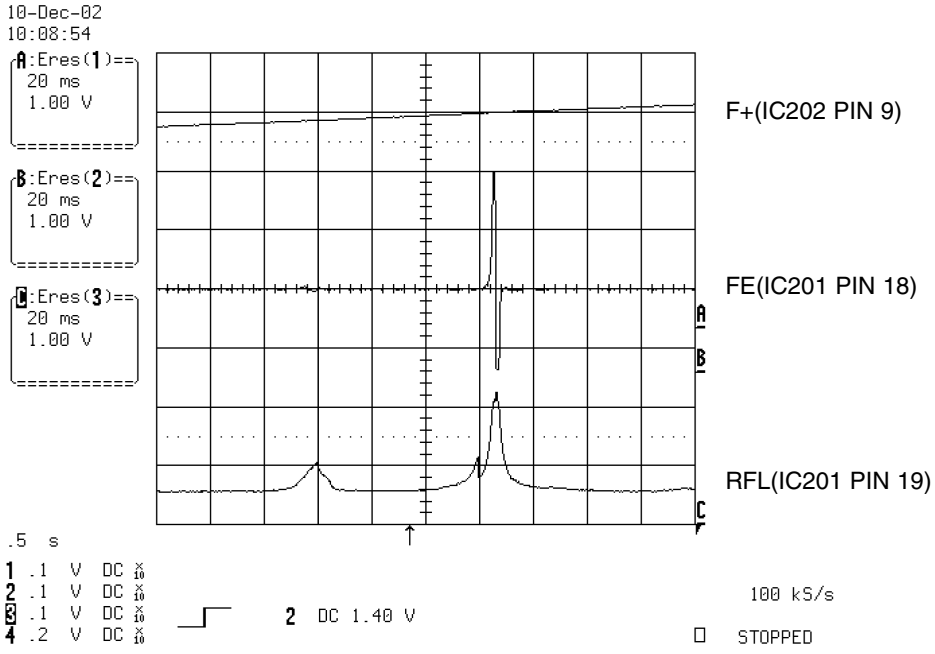


FIG 7-2 (DVD)

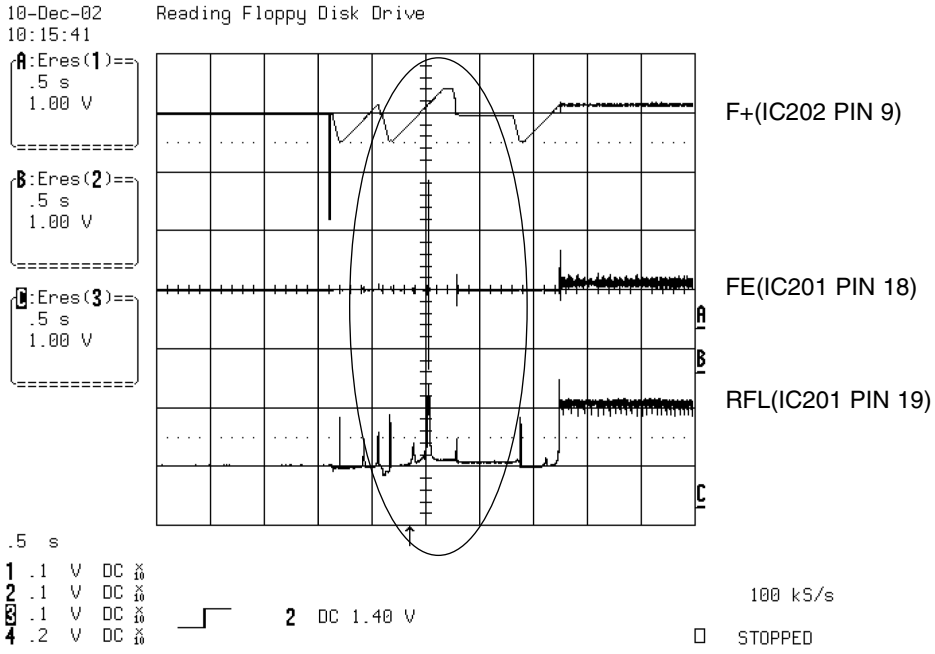


FIG 7-3 (CD)

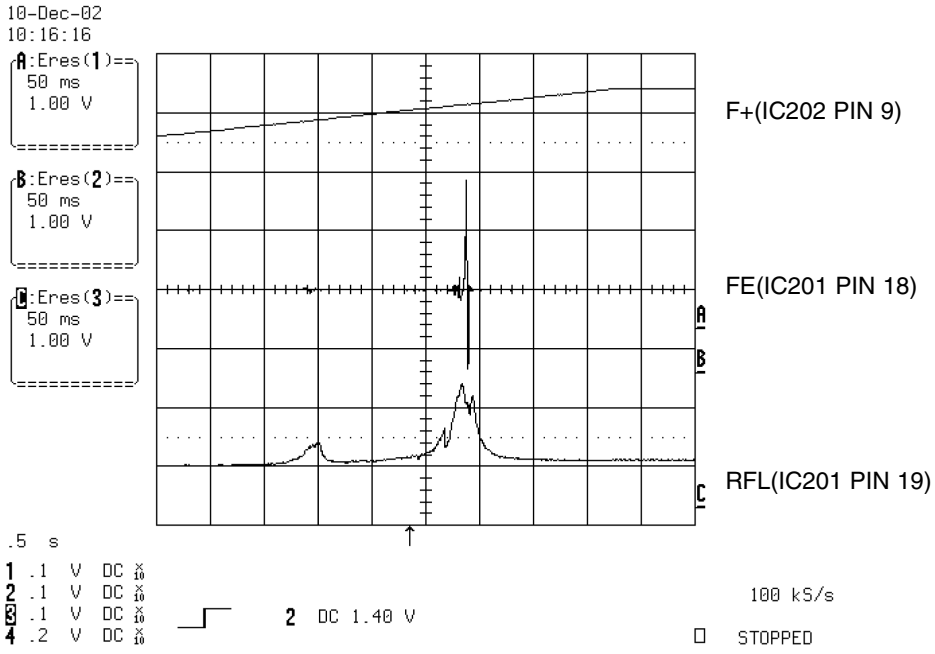


FIG 7-4 (CD)

8. FOCUS ON WAVEFORMS

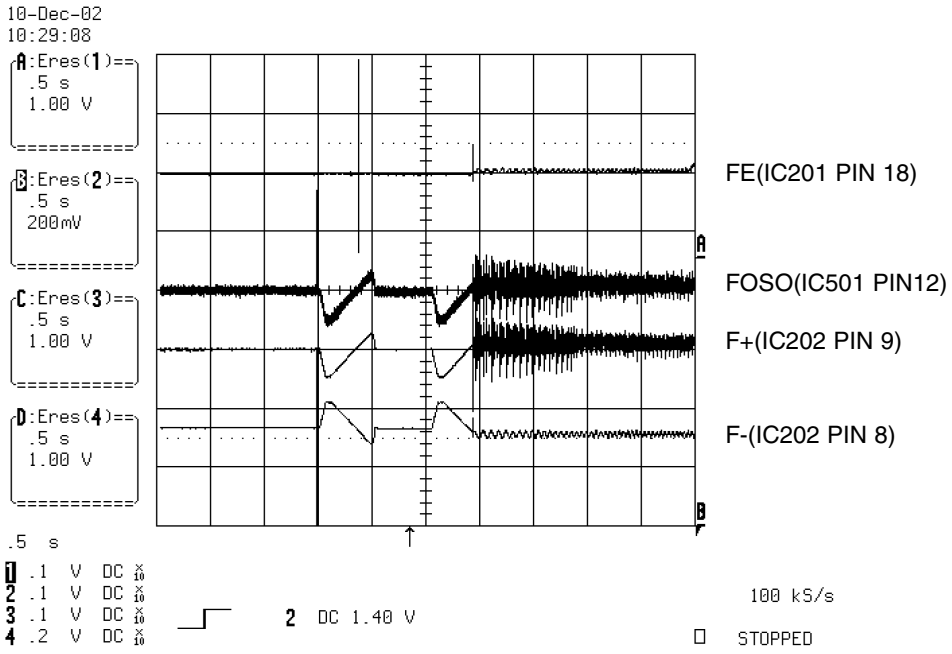


FIG 8-1 (DVD)

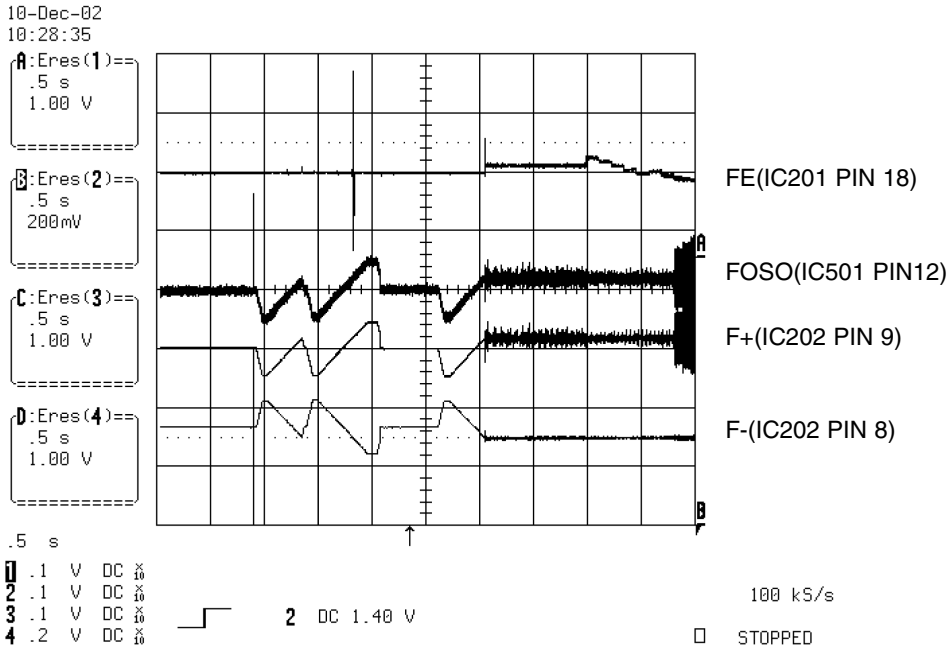


FIG 8-2 (CD)

9. SPINDLE CONTROL WAVEFORMS (NO DISC CONDITION)

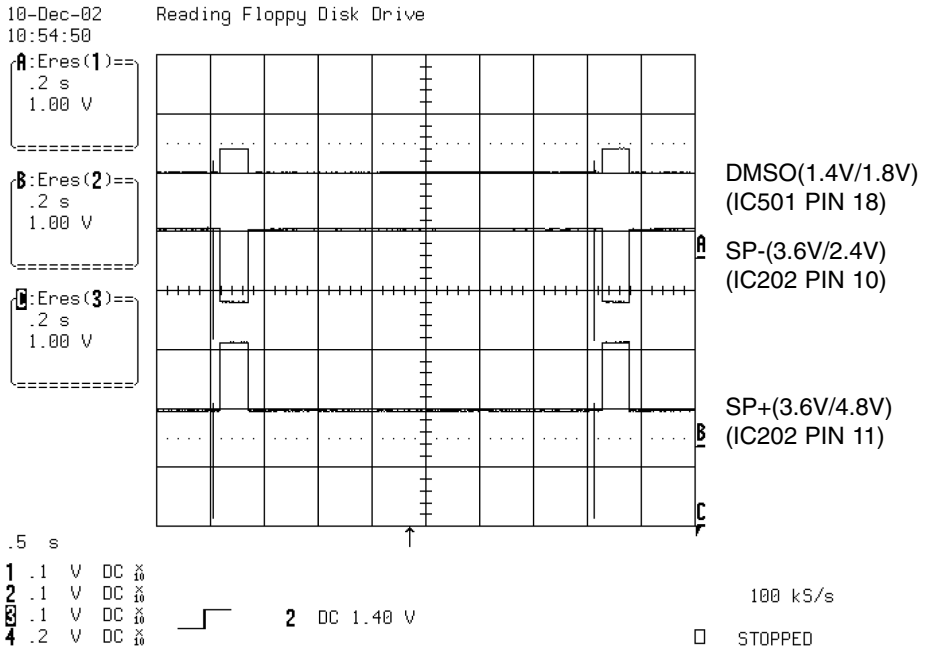


FIG 9-1

10. TRACKING CONTROL RELATED SIGNAL(System checking)

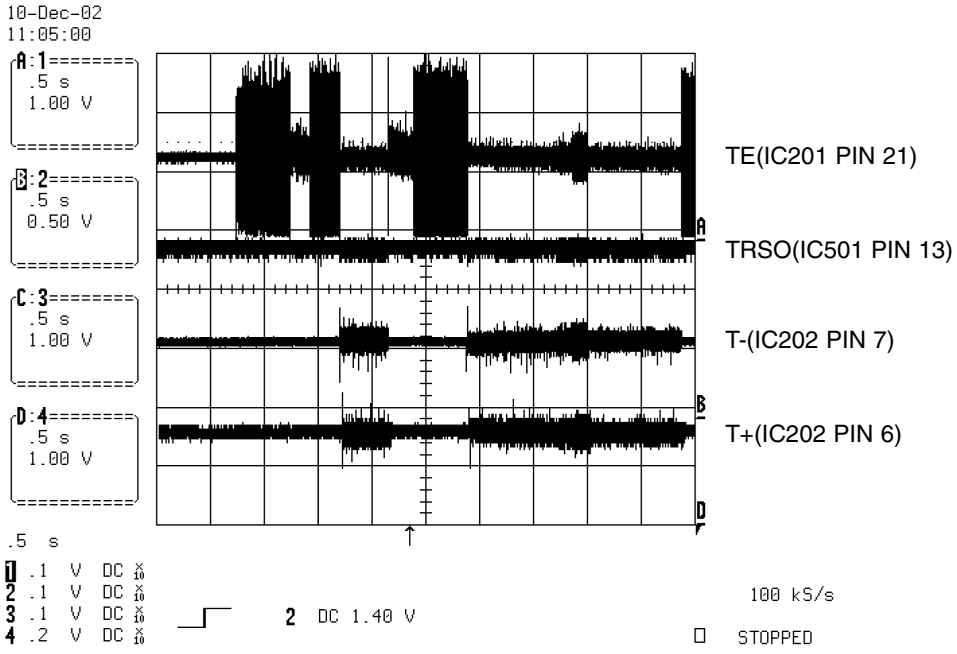


FIG 10-1(DVD)

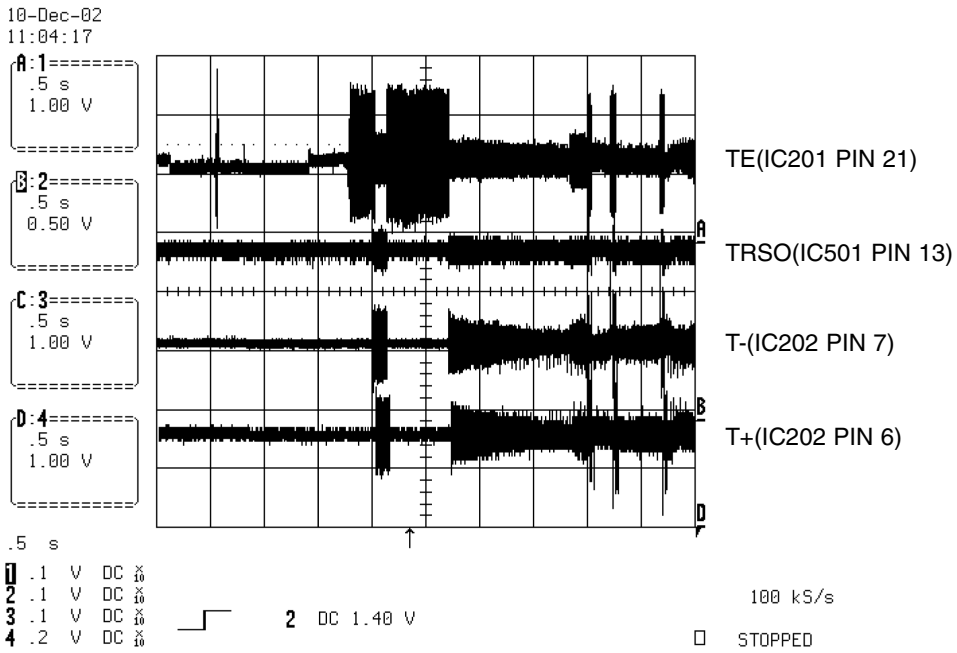


FIG 10-2(CD)

11. RF WAVEFORM

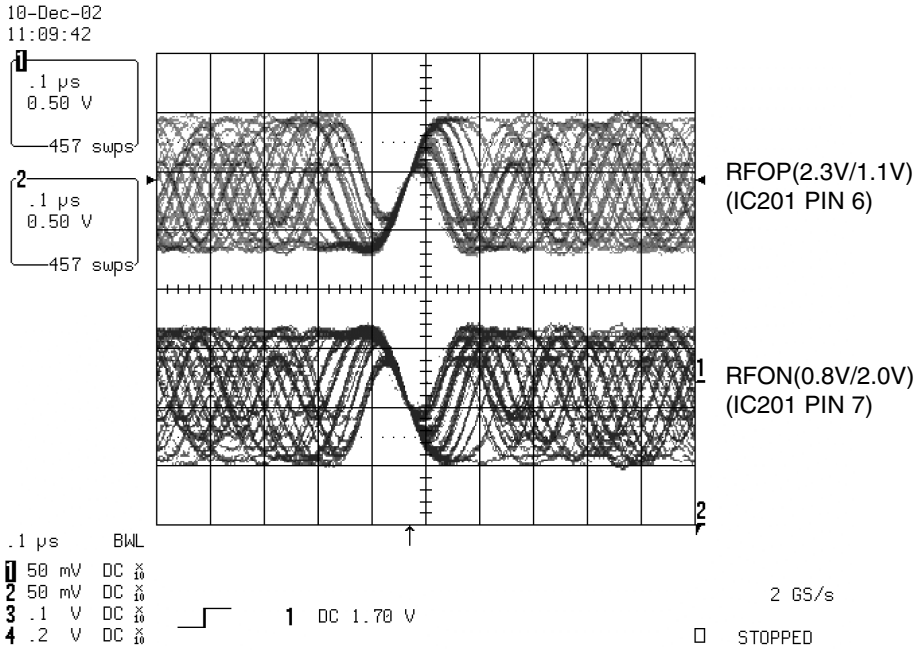


FIG 11-1

12. MT1379 AUDIO OPTICAL AND COAXIAL OUTPUT (ASPDIF)

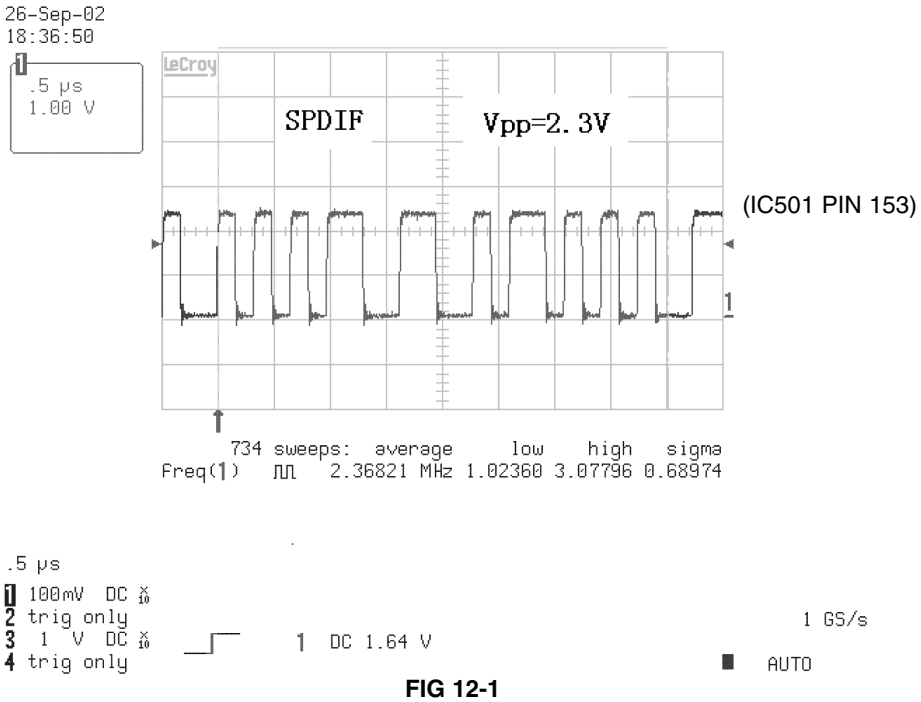
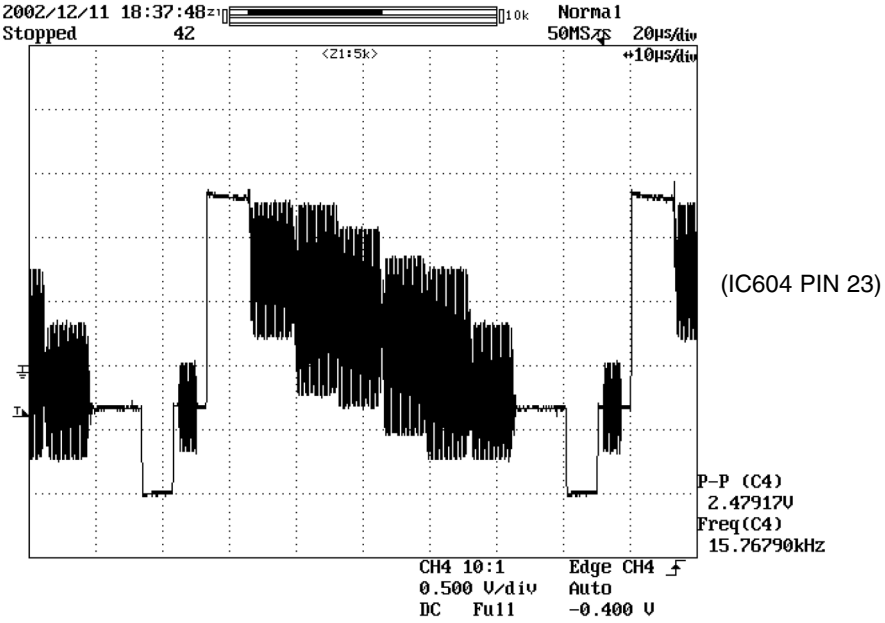


FIG 12-1

13. MT1379 VIDEO OUTPUT WAVEFORMS

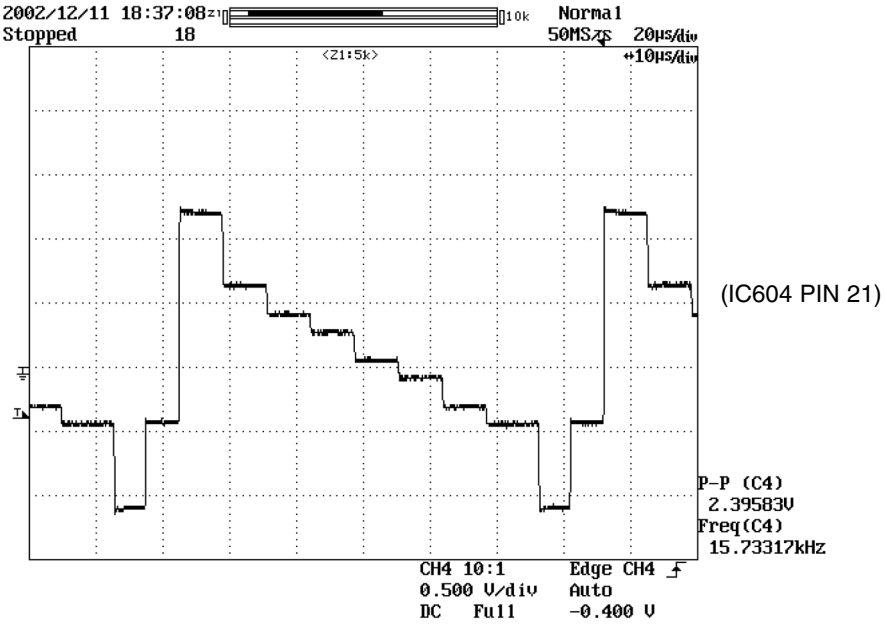
1) Full colorbar signal(CVBS)



(IC604 PIN 23)

FIG 13-1

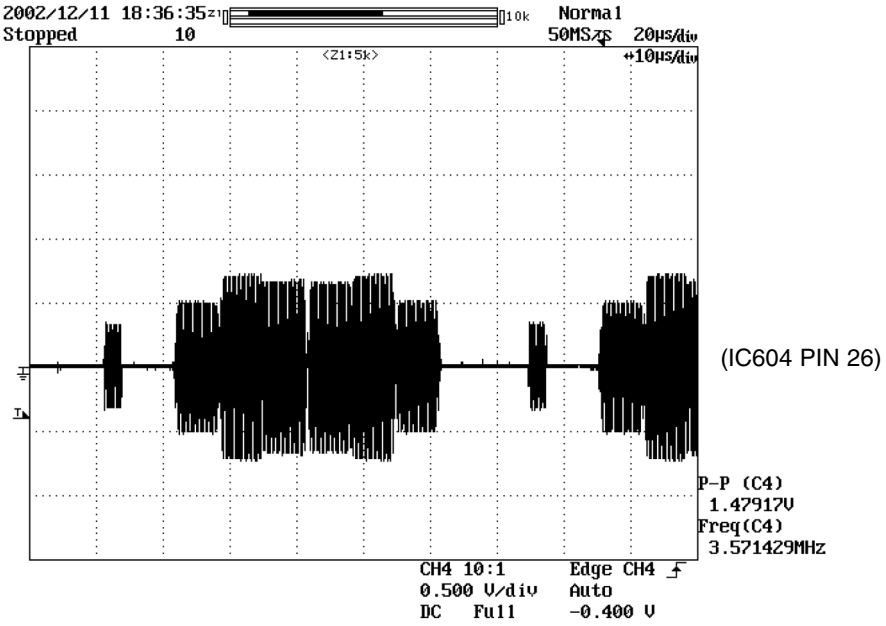
2) Y



(IC604 PIN 21)

FIG 13-2

3) C

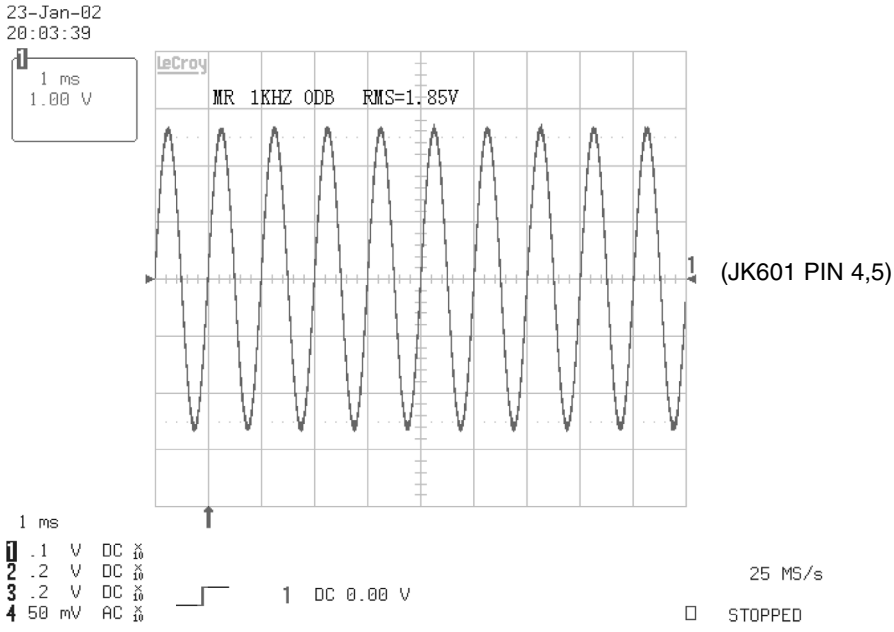


(IC604 PIN 26)

FIG 13-3

14. AUDIO OUTPUT FROM AUDIO DAC

1) Audio L/R



(JK601 PIN 4,5)

FIG 14-1

2) Audio related Signal

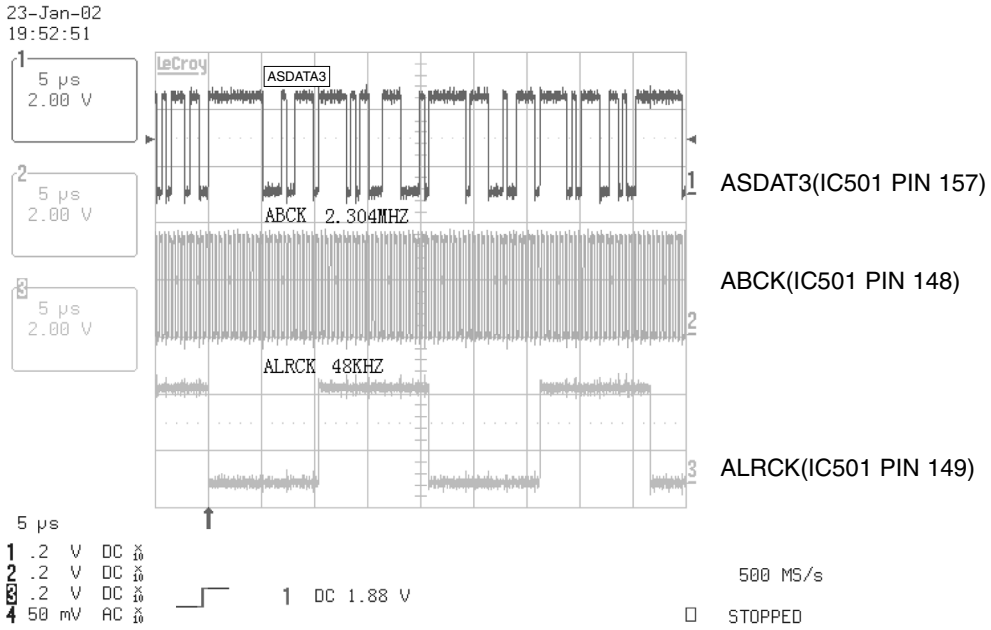
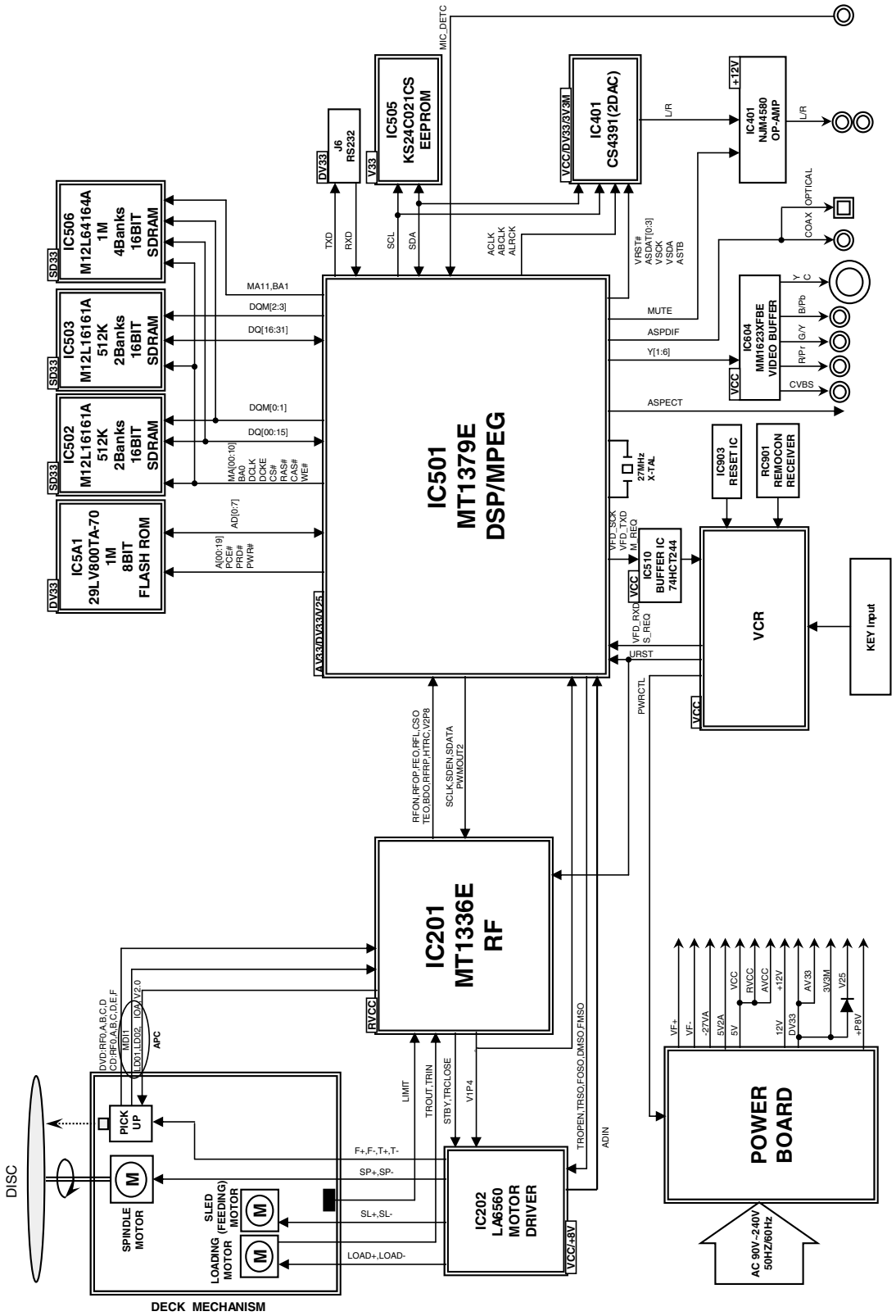


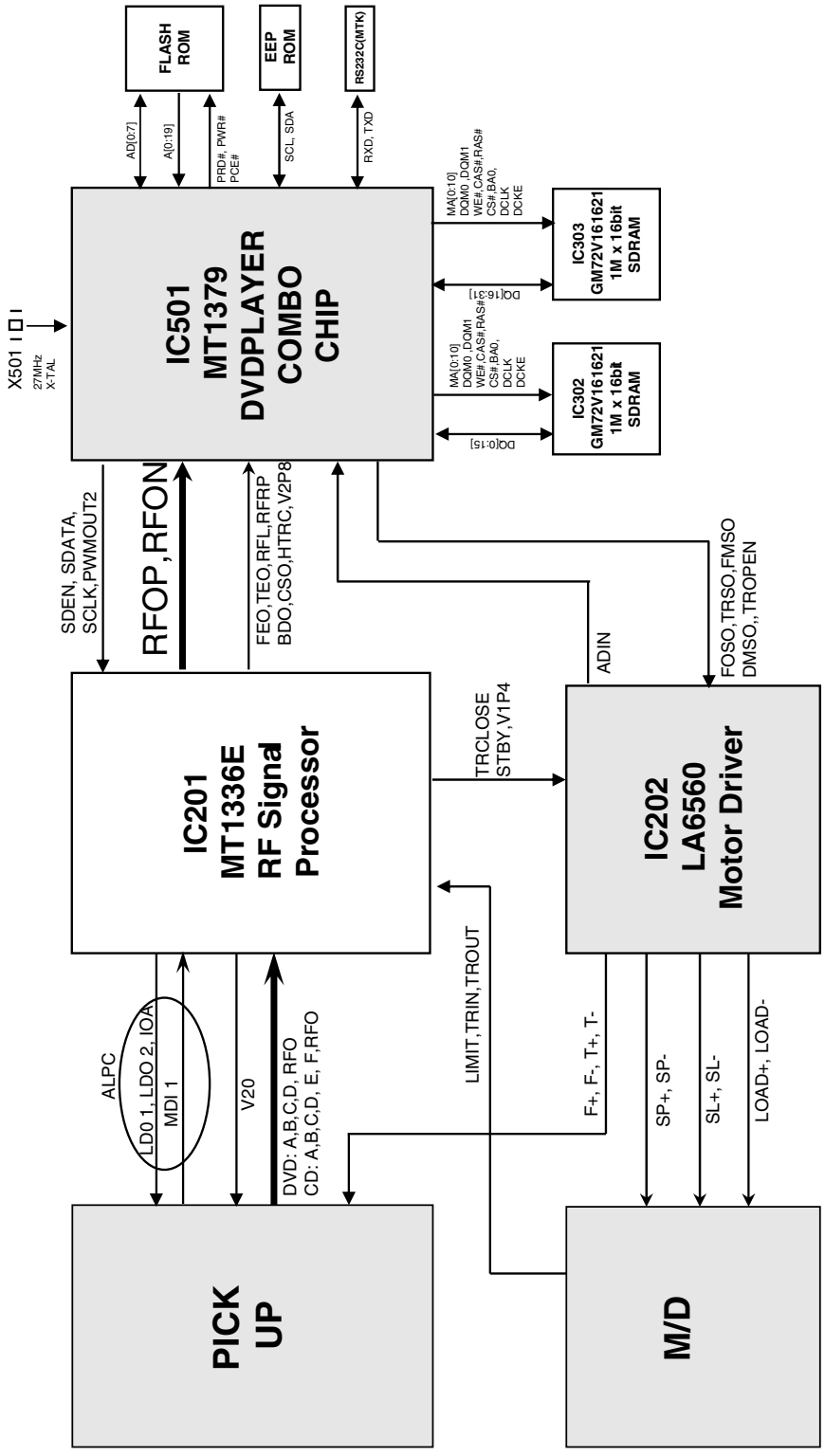
FIG 14-2

BLOCK DIAGRAMS

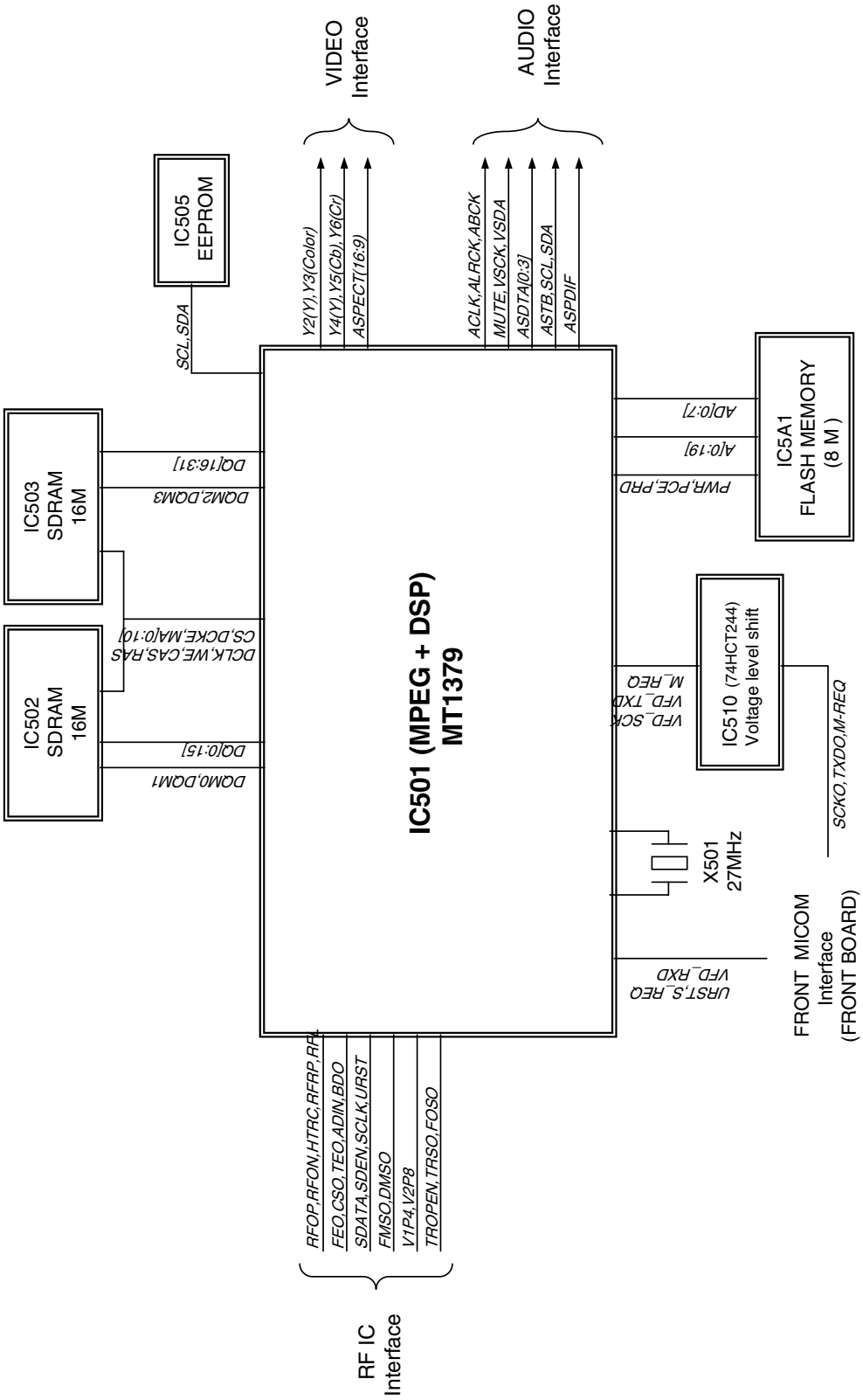
1. Overall Block Diagram



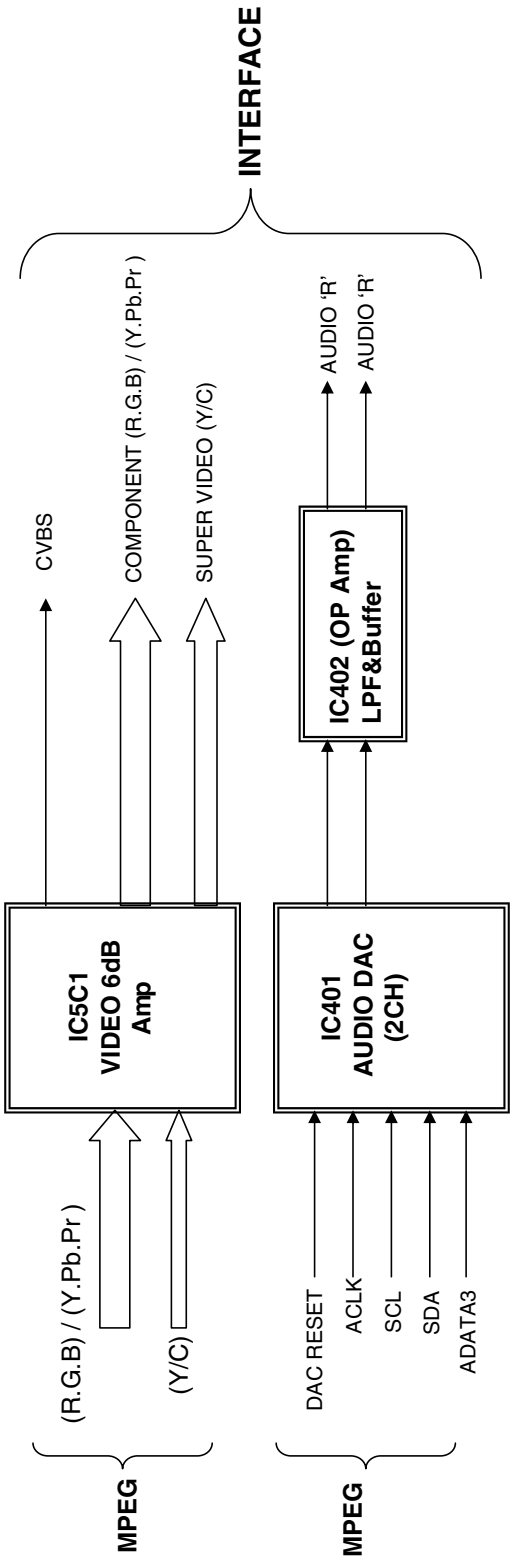
2. SERVO Block Diagram



3. MPEG & MEMORY Block Diagram



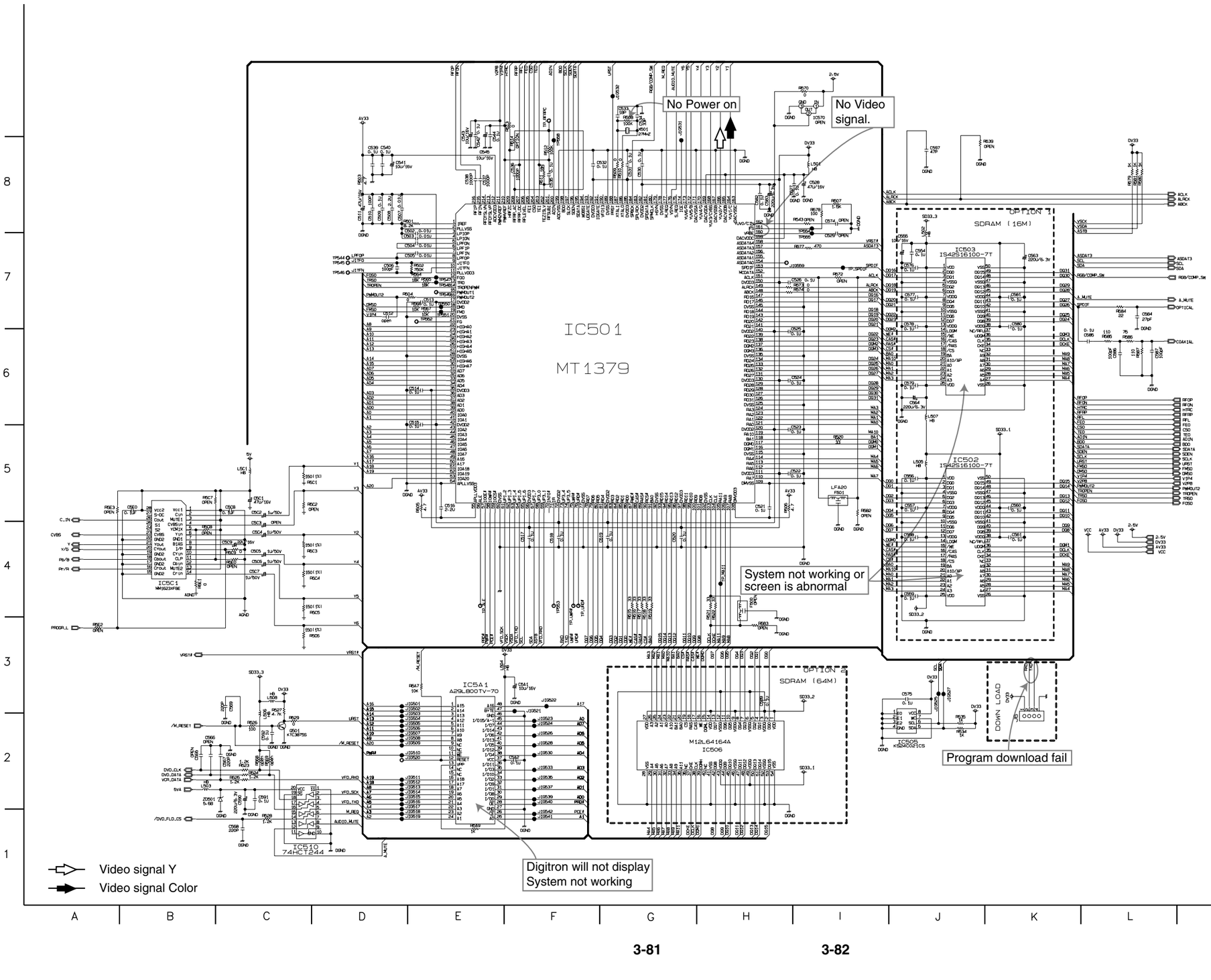
4. VIDEO & AUDIO Block Diagram



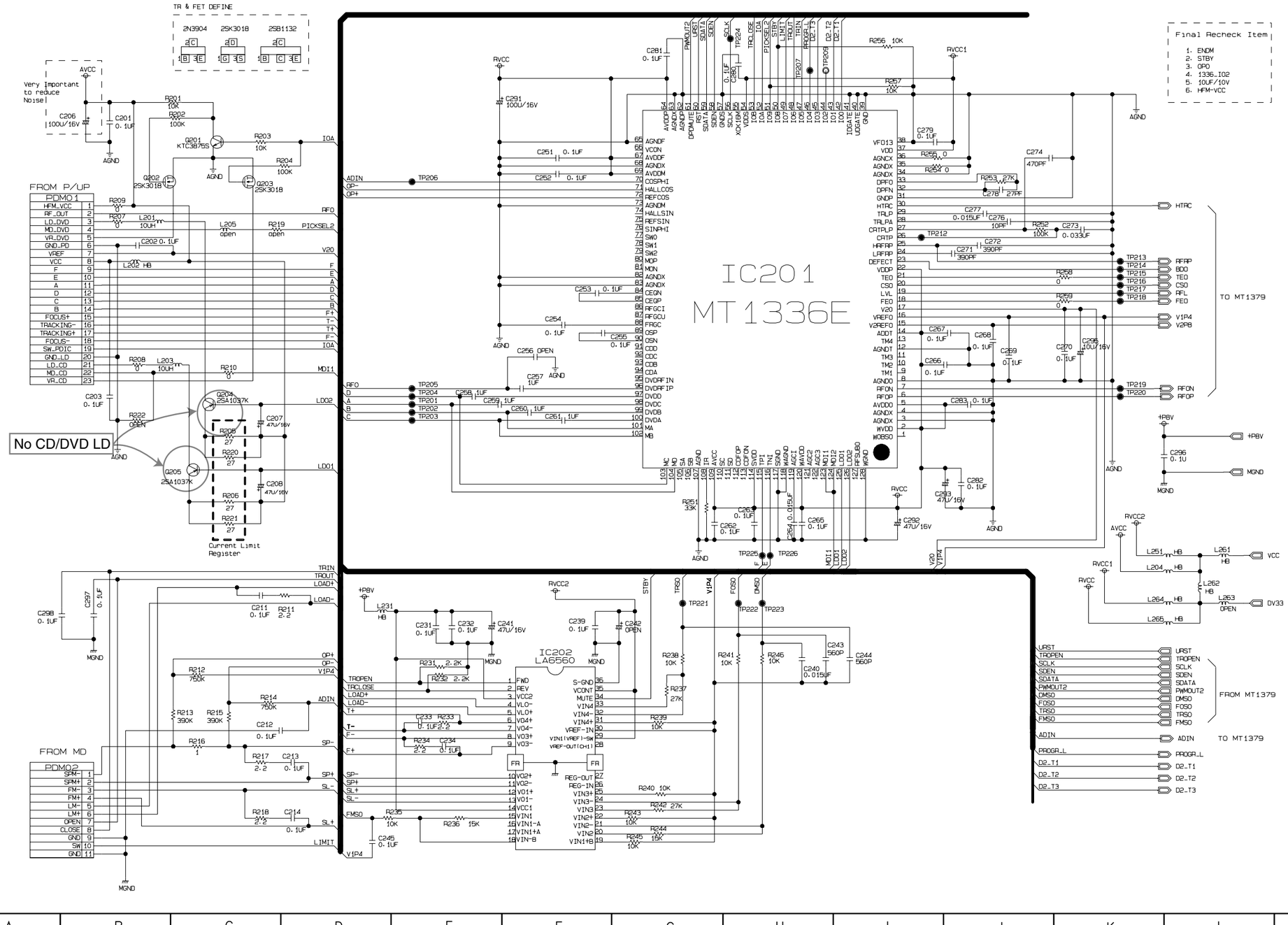
MEMO

CIRCUIT DIAGRAMS

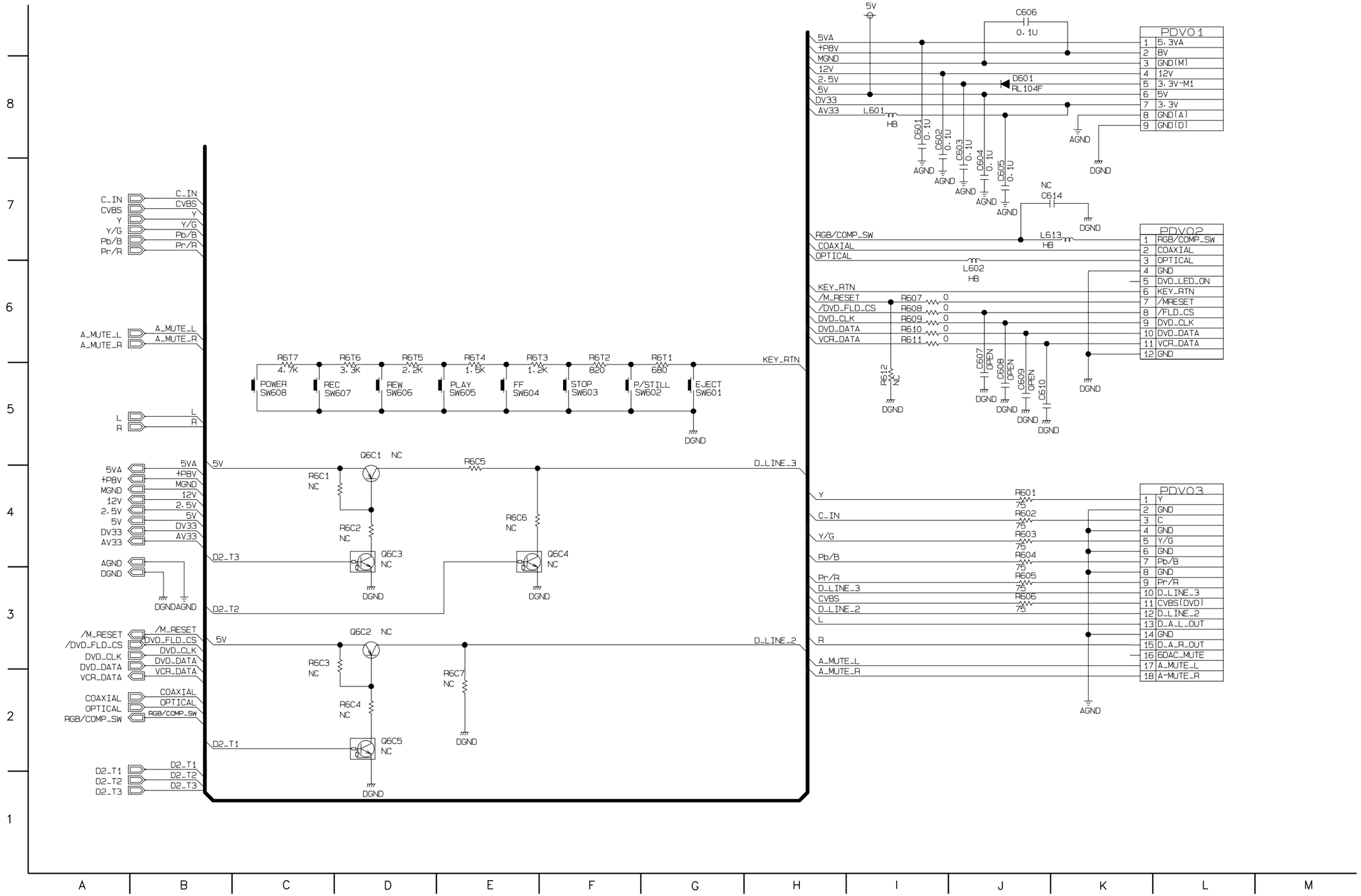
1. SYSTEM CIRCUIT DIAGRAM



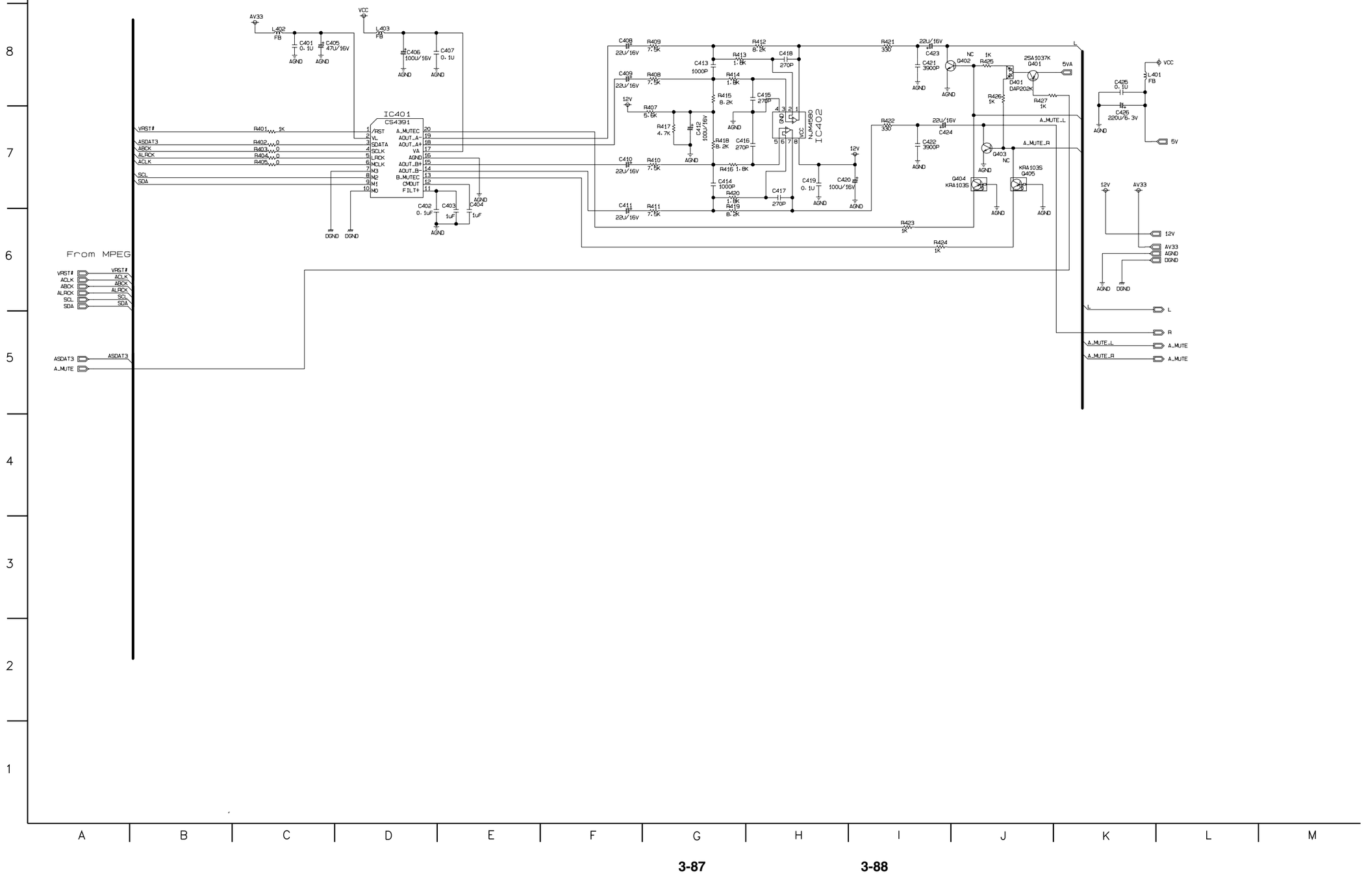
2. RF & DSP SERVO CIRCUIT DIAGRAM



3. AUDIO CIRCUIT DIAGRAM



4. AV/JACK CIRCUIT DIAGRAM



• CIRCUIT VOLTAGE CHART

	IC201(MT1336E)		IC202(MOTOR)		IC501(MT1379)		IC502(SDRAM)		IC505(EEPROM)		IC510(BUFFER)		IC5A1(FLASH)		IC401(CS4391)		IC402(AMP)		IC5C1(MM1623XFBE)	
PIN	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY
1	1.03	2.99	0	0	1.22	1.22	3.27	3.28	0	0	0	0								
2	5.11	5.08	0	0	0	0	1.18	1.26	0	0	2.59	2.55	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY
3	0	0	8.04	8.01	0.96	0.9	1.1	1.52	0	0	0	0	0.08	0.16	3.28	3.29	5.52	5.49	5.09	5.08
4	0	0	0.12	0.06	2	2.06	0	0	0	0	2.59	2.56	1.82	0.45	3.28	3.28	5.52	5.48	2.43	2.42
5	5.11	5.07	0	0.06	0	1.51	0.66	1.07	3.28	3.29	0	0	2.84	0	0	1.65	5.51	5.47	5.09	5.08
6	0	1.95	3.64	3.69	1.48	1.47	0.85	1.12	3.28	3.29	3.24	3.23	2.83	3.12	1.63	1.64	0	0	1.45	0
7	0	0	3.62	3.61	0	1.56	3.27	3.28	0	0	0	0	0.69	0.26	1.64	1.65	5.51	5.48	0	0
8	0	0	3.64	3.53	3.2	1.52	0.51	0.97	3.28	3.29	0.14	0.08	1.72	0.25	1.59	1.61	5.51	5.48	1.45	1.69
9	5.11	0	3.6	3.76	0.12	0.06	3.06	0			0	0	1.92	0.9	0	0	5.52	5.47	0	0
10	5.11	5.08	3.62	2.43	0.12	0.06	0	0			0	0	1.7	1.45	3.28	0	12.03	12.03	2.47	2.46
11	5.11	5.08	3.63	4.85	3.25	3.25	0.06	0.98			0.15	0.09	0	0	3.28	3.29			0	0
12	0	0	3.62	3.72	1.41	1.49	3.18	0.87			0	0	0	0	0	0			1.14	1.76
13	5.11	0	3.64	3.57	1.41	1.41	3.27	3.28			0.15	0.08	3.27	3.29	5.01	5.01			0	0
14	5.11	5.08	8.04	8.01	0	0	2.94	2.56			5.19	5.19	3.56	3.55	2.31	2.31			2.42	2.42
15	2.84	2.81	1.45	1.48	1.42	1.42	0.47	0.42			0.14	0.09	3.29	3.29	4.96	0			5.09	5.08
16	1.45	1.43	0.27	1.39	3.3	0	2.93	3.01			5.25	5.24	0	0	1.42	2.41			2.43	2.42
17	2.08	2.07	0.29	1.32	2.53	2.53	3.21	3.22			0.15	0.08	0.23	0.06	2.4	2.39			0	0
18	1.37	1.42	1.45	1.43	1.42	2.27	2.87	2.95			5.23	5.23	0	0	0	0			2.49	2.47
19	0.69	2.3	1.45	1.43	1.42	1.39	0.15	1.32			0	0	0	0	5.11	5.09			0	0
20	2.4	0	1.45	0.82	0	0	0	0.05			5.25	5.25	0	0.87	2.41	2.41			2.48	2.47
21	2.35	0	1.45	1.43	2.61	2.58	3.09	1.32					1.98	2.64	2.43	2.43			0	0
22	5.11	5.08	1.45	1.43	0.75	1.46	3.09	1.32					2.28	2.18	0	0			1.18	2.3
23	0	0	1.47	1.37	2.83	1	3.09	1.32					2.13	1.96					1.76	2.17
24	2.59	3.2	1.45	1.43	1.9	0.89	3.09	1.33					1.67	2.01					0	0
25	0.19	1.88	1.45	1.43	1.72	0.39	3.27	3.29					1.99	1.72					1.76	2.24
26	1.58	0	0.95	0.91	0.68	0.31	0	0					1.93	2.19					0	0
27	2.56	3.13	0	0	2.84	3.16	0.15	1.36					2.05	1.94					0	0
28	2	2.01	1.45	1.43	0	0	1.84	2.36					0	0					0	0
29	2	2.06	5.15	5.11	2.85	0.66	1	2.32					0	0					0.06	0.05
30	2.96	1.52	1.45	1.43	1.83	0.49	0.54	1.75					0	0					5.09	0
31	0	0	1.45	1.43	0.91	1.39	0.06	0.06					1.49	2.03						
32	0.06	2.07	1.45	1.43	1.43	1.2	0.05	0.06					0.16	1.07						
33	0.07	2.07	1.46	1.45	1.51	1.57	0	0					1.96	1.25						
34	0	0	5.08	5.06	1.51	1.43	0.73	1.26					0.16	1.1						
35	0	0	5.15	5.11	3.3	3.29	1.48	1.55					0.99	2.2						
36	0	0	0	0	0.81	1.26	2.91	2.53					1.17	1.07						
37	5.13	0			1.45	1.02	0.07	0					0.79	1.82						
38	0	0			1.82	1.6	3.27	3.28					0.15	1.07						
39	0	0			1.2	1.5	1.06	1.05					3.29	3.3						
40	0	0			2	2.06	0.47	0.98					1.93	3.09						
41	0	0			2.17	1.95	0	0					0.16	1.07						
42	5.12	5.09			2.53	2.52	0	0.6					1.5	2.2						
43	5.12	5.09			1.96	1.9	1.12	1.24					0.16	1.07						
44	5.12	5.09			1.79	1.9	3.27	3.28					1.21	2.64						
45	5.12	5.09			0.8	1.72	1.21	0.99					0.16	1.08						
46	5.12	5.09			0.8	1.96	1.31	1.34					1.64	1.48						
47	0	0			0.8	1.84	0	0					2.05	2.06						
48	5.12	5.09			3.3	2.63	1.43	1.44					0	0						
49	5.12	0			0	0.13	0.88	1.01					0	0						
50	5.08	5.06			0	0.07	0	0					0.07	0.13						
51	5.09	5.07			0	0														
52	5.1	0			0	0														
53	0	0			0	0														
54	5.13	0			0	0														
55	0.09	0.2			3.25	3.27														
56	1.61	0			1.21	1.18														
57	0	0			0	0														
58	0	0			3.29	3.29														
59	0	0			0	0														
60	0	0			0	0														
61	3.28	0			2.59	2.57														
62	0	0			2.58	2.58														
63	0	0			0	0														
64	0	0			2.59	2.56														
65	0	0			3.29	3.29														
66	0.26	0			3.3	3.29														
67	5.12	5.08			3.29	3.29														
68	0	0			2.57	2.56														
69	5.12	0			5.19	5.18														
70	3.21	2.03			2.59	2.57														
71	3.46	2.2			0.12	0.08														
72	2.81	0			2.53	2.52														
73	0	0			2.59	2.57														
74	0.21	0.09			3.29	3.29														
75	0.22	0			2.61	2.61														
76	0	0.1			3.27	3.24														
77	0.21	0.09			0	0														
78	0.23	0.09			0.94	1.04														
79	0.21	0.08			0.78	1.06														
80	0.23	0.08			0.89	1.15														

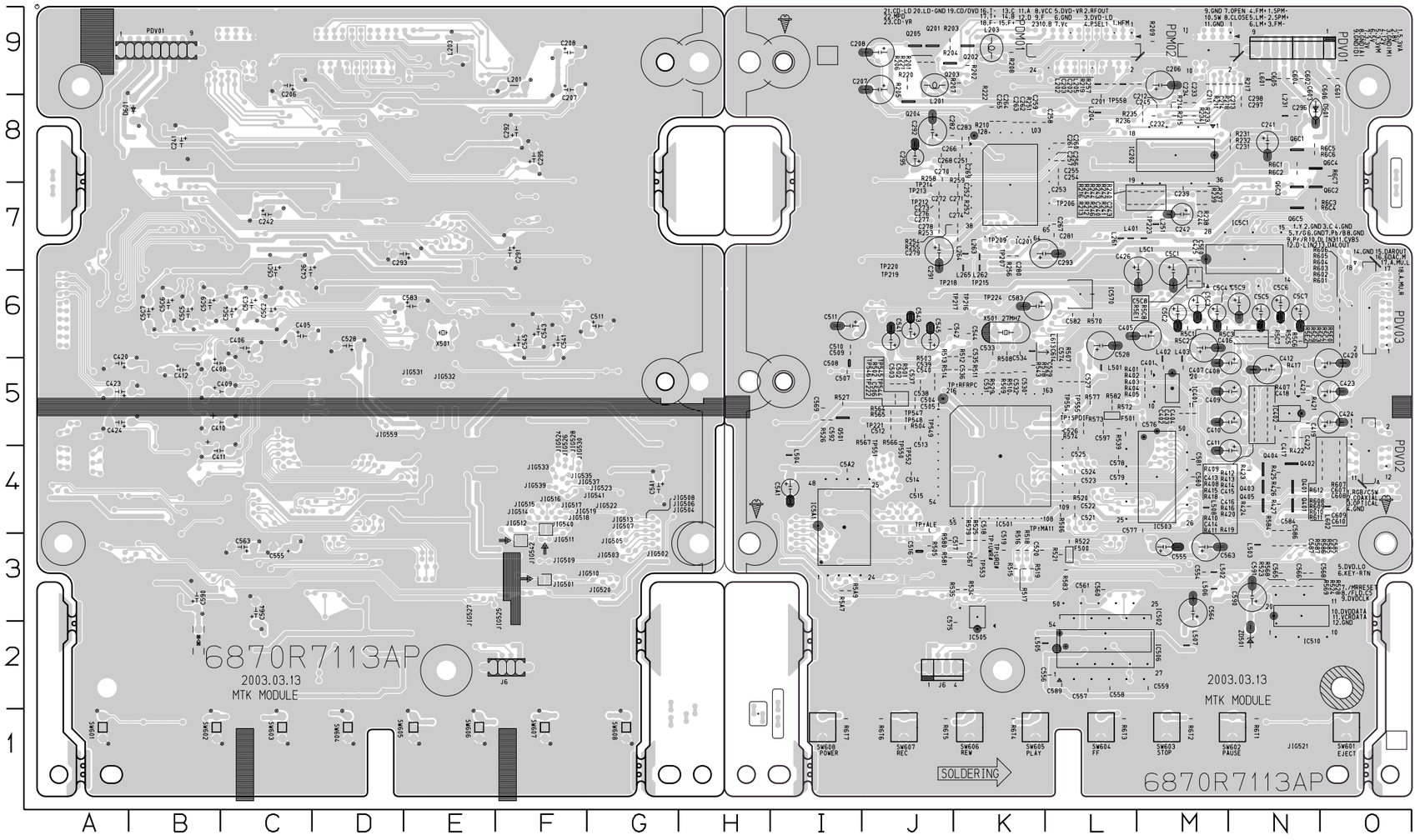
	IC201(MT1336E)		IC202(MOTOR)		IC501(MT1379)		IC502(SDRAM)		IC505(EEPROM)		IC510(BUFFER)		IC5A1(FLASH)		IC401(CS4391)		IC402(AMP)		IC5C1(MM1623XFBE)	
PIN	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY
81	0.22	0			0.99	1.34														
82	0	0			2.52	2.52														
83	0	0			3.09	1.33														
84	0.07	0			0.37	1.16														
85	0.07	2.27			3.08	1.1														
86	1.97	0			3.07	1.08														
87	1.96	1.9			0.59	1.04														
88	1.54	1.71			1.57	2.53														
89	0.19	2.22			3.2	3.13														
90	0.21	0			2.77	2.53														
91	0.22	0.06			0.22	1.68														
92	0.22	0			0	0														
93	0.23	0.06			3.32	1														
94	0.23	0.06			0.16	1.58														
95	2.28	0			3.31	1.62														
96	2.28	2.25			3.3	1.08														
97	2.27	1.23			3.3	3.29														
98	2.27	2.23			3.32	1.62														
99	2.27	2.23			0.16	1.09														
100	2.26	2.23			3.32	1.27														
101	2.08	2.17			3.3	1.32														
102	2.07	2.17			0	0														
103	2.07	2.18			1.56	1.55														
104	2.08	0			0.94	1.25														
105	0.14	0.15			0.41	0														
106	0.14	0.16			0.05	0.06														
107	0	0			0	0.06														
108	1.28	1.28			3.27	3.26														
109	5.18	5.05			0	0														
110	0.14	0.16			0.19	1.74														
111	0.15	0.15			3.3	3.29														
112	0.13	0.16			0.18	1.62														
113	0.14	0.15			2.98	2.38														
114	5.1	5.05			3.02	1.48														
115	2.07	2.09			0	0														
116	2.06	2.09			2.86	3.01														
117	0	0			2.86	2.54														
118	0	0			0	0														
119	0	0			0	2.5														
120	5.1	5.05			2.55	2.51														
121	0.13	0.15			3.03	1.4														
122	0.14	0.15			3.03	1.4														
123	0	0.18			0.22	1.39														
124	0	0.18			0.22	0.34														
125	5.08	5.03			0	0														
126	5.08	3.16			3.31	0.98														
127	0.06	2.08			0.26	1.64														
128	0	0			3.31	1.53														
129					3.3	1.15														
130					3.3	3.29														
131					3.31	1.49														
132					0.16	0.89														
133					3.3	0														
134					3.3	1.07														
135					0	0														
136					2.86	2.53														
137					2.86	2.53														
138					0.07	0.86														
139					0.09	0.99														
140					0.07	2.51														
141					0.07	0.94														
142					0.09	1.13														
143					0.07	1.19														
144					0.09	1.07														
145					0.09	0														
146					0	1.51														
147					0.09	1.25														
148					0.07	1.64														
149					0.06	0														
150					0	1.65														
151					0.07	3.29														
152					0	1.6														
153					0	1.64														
154					0	1.44														
155					0	0														
156					0	0														
157					0	1.63														
158					0	3.29														
159					0	3.27														
160					0	1.27														

	IC201(MT1336E)		IC202(MOTOR)		IC501(MT1379)		IC502(SDRAM)		IC505(EEPROM)		IC510(BUFFER)		IC5A1(FLASH)		IC401(CS4391)		IC402(AMP)		IC5C1(MM1623XFBE)	
PIN	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY
161					0	1.27														
162					0	2.35														
163					0	0														
164					0	0.73														
165					0	3.27														
166					0	0.5														
167					0	0														
168					0	0.53														
169					0	3.27														
170					0	0.59														
171					0	0														
172					3.01	0.72														
173					0	0.72														
174					0	0														
175					0	2.73														
176					0	3.13														
177					0	3.13														
178					0	3.25														
179					0	0														
180					0	0														
181					2.04	2.64														
182					0	2.52														
183					0	0														
184					0	0.09														
185					0	3.26														
186					-	-														
187					0	0.08														
188					0	0														
189					0	0														
190					0	0														
191					0.23	0														
192					0	3.29														
193					0	0														
194					0	0														
195					0	0														
196					0	0														
197					0	1.63														
198					0	0														
199					0	0														
200					0	2.15														
201					0	1.44														
202					0	1.44														
203					0	1.43														
204					0	1.43														
205					0	1.42														
206					0	2.1														
207					0	2.07														
208					0	1.41														
209					0	1.52														
210					0	1.43														
211					0	2.81														
212					0	3.28														
213					0	0.12														
214					0	0.12														
215					1.02	1.43														
216					0	1.43														

	Q201		Q202		Q203		Q204	
	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY
E	0	0	0	0	0	0	5.14	4.34
C	0	5.09	0	0	0	0.19	0	2.42
B	0.68	0	0	5.04	5.04	0	5.08	3.64
	Q205		Q501		Q6401			
	STOP	PLAY	STOP	PLAY	STOP	PLAY		
E	5.14	5.10	0	5.17	0			
C	0.5	0	0	0	0	0.13		
B	5.08	5.05	0.83	0.83	5.11	0		

PRINTED CIRCUIT DIAGRAMS

1. MTR P.C.BOARD



LOCATION GUIDE

JIG501	F3	C201	L8	C298	N8	C534	K6	C602	N9	PDV02	04	R254	K7	R528	N3	R6C6	N8
JIG502	G3	C202	L9	C401	M5	C535	K6	C603	N8	PDV03	06	R255	K7	R529	K5	R6C7	08
JIG503	G3	C203	L9	C402	M5	C536	K5	C604	N9	Q201	J9	R256	K7	R534	K3	R6T1	N1
JIG504	G3	C206	M9	C403	M5	C537	J5	C605	N9	Q202	K9	R257	M9	R535	K3	R6T2	M1
JIG505	G3	C207	J9	C404	M5	C538	J5	C606	09	Q203	J9	R258	J8	R539	L5	R6T3	L1
JIG506	G4	C208	J9	C405	M5	C539	J5	C607	04	Q204	J6	R259	K8	R543	L5	R6T4	K1
JIG507	G4	C211	M9	C406	M5	C540	J5	C608	04	Q205	J9	R401	M5	R562	J5	R6T5	J1
JIG508	G4	C212	M8	C407	M5	C541	J6	C609	04	Q401	N4	R402	M5	R565	J5	R6T6	J1
JIG509	F3	C213	N9	C408	N5	C542	J6	C610	04	Q402	N4	R403	M5	R566	J5	R6T7	I1
JIG510	G3	C214	M9	C409	N5	C543	J6	C614	K5	Q403	N4	R404	M5	R567	J5	SW601	01
JIG511	F3	C231	N8	C410	N5	C544	K6	D401	N4	Q404	N4	R405	M5	R568	N3	SW602	N1
JIG512	F4	C232	M8	C411	N4	C545	J6	D601	N8	Q405	N4	R407	N5	R569	N3	SW603	M1
JIG513	G4	C233	M8	C412	N5	C554	M3	F500	L3	Q501	J5	R408	N5	R570	L6	SW604	L1
JIG514	F4	C234	M8	C413	N5	C555	M3	F501	L5	Q6C1	N8	R409	N5	R572	L5	SW605	K1
JIG515	F4	C239	M7	C414	N5	C556	L2	IC201	K7	Q6C2	N7	R410	N5	R573	L5	SW606	K1
JIG516	F4	C240	M7	C415	N5	C557	L2	IC202	M8	Q6C3	N7	R411	N5	R574	L5	SW607	J1
JIG517	F4	C241	N8	C416	N5	C558	L2	IC401	M5	Q6C4	N8	R412	N5	R577	L5	SW608	I1
JIG518	F4	C242	M7	C417	N5	C559	M2	IC402	N5	Q6C5	N7	R413	N5	R578	L5	TP206	L7
JIG519	F4	C243	M7	C418	N5	C560	L3	IC501	K4	R201	J9	R414	N5	R579	K3	TP207	K7
JIG520	G3	C244	M7	C419	N5	C561	L3	IC502	L2	R202	K9	R415	N5	R580	J3	TP209	K7
JIG522	G4	C245	M8	C420	05	C563	M3	IC503	M4	R203	J9	R416	N5	R581	J3	TP212	J7
JIG523	G4	C251	K8	C421	N5	C564	M3	IC505	K3	R204	J9	R417	N5	R582	L5	TP213	J7
JIG524	F4	C252	K7	C422	N5	C565	N3	IC506	L2	R205	J9	R418	N5	R583	L3	TP214	J7
JIG525	E3	C253	L7	C423	05	C566	N3	IC510	N3	R206	J9	R419	N5	R584	N4	TP215	K6
JIG526	F4	C254	L8	C424	05	C567	K3	IC570	L6	R207	K9	R420	N5	R585	N3	TP216	K6
JIG527	E3	C255	L8	C425	M7	C568	N3	IC5A1	I4	R208	K9	R421	N5	R586	N3	TP217	K6
JIG528	F4	C256	L8	C426	M6	C569	I5	IC5C1	N7	R209	M9	R422	N5	R587	N3	TP218	K6
JIG530	F4	C257	L8	C502	J5	C574	L5	J6	J2	R210	K8	R423	N4	R5A7	I3	TP219	J6
JIG531	E5	C258	K8	C503	J5	C575	K2	JIG521	N1	R211	M9	R424	N4	R5A9	I3	TP220	J7
JIG532	E6	C259	K8	C504	J5	C576	L5	L201	J9	R212	L7	R425	N4	R5C1	M6	TP221	J5
JIG533	F4	C260	L8	C505	J5	C577	M4	L202	L9	R213	L7	R426	N4	R5C2	M6	TP222	J5
JIG535	F4	C261	L8	C506	J5	C578	L4	L203	K9	R214	M8	R427	N4	R5C3	M6	TP223	M7
JIG537	F4	C262	K8	C507	I5	C579	L4	L204	L8	R215	M8	R501	J5	R5C4	N6	TP224	K6
JIG539	F4	C263	K8	C508	I5	C580	M4	L205	L9	R216	L7	R502	J5	R5C5	N6	TP544	J5
JIG540	F4	C264	K8	C509	I6	C581	M4	L231	N8	R217	N9	R503	J5	R5C6	N6	TP545	J5
JIG541	F4	C265	K8	C510	I6	C582	L6	L251	M7	R218	M9	R504	J5	R5C7	N6	TP546	J5
JIG542	F3	C266	K8	C511	I6	C583	K6	L261	L7	R219	L9	R505	J3	R5C8	M6	TP547	J5
JIG559	D5	C267	L7	C512	J5	C584	N4	L262	K7	R220	J9	R506	L4	R5C9	N6	TP548	J5
TP201	D9	C268	J8	C513	J5	C585	N3	L263	K7	R221	J9	R507	L5	R5E0	N6	TP549	J5
TP202	D9	C269	K8	C514	J4	C586	N4	L264	K7	R222	K8	R508	K6	R5E1	M6	TP550	J5
TP203	D9	C270	J8	C515	J4	C587	N3	L265	K7	R231	N8	R509	K5	R5E2	N6	TP551	J5
TP204	D9	C271	K7	C516	J3	C589	L2	L401	L7	R232	N8	R510	K5	R5E3	N6	TP552	J5
TP205	D9	C272	J7	C517	K3	C590	N3	L402	M5	R233	M8	R511	K5	R601	06	TP553	K3
TP225	D9	C273	J7	C518	K3	C591	N3	L403	M5	R234	M8	R512	K6	R602	06	TP554	L5
TP226	D9	C274	K7	C519	K3	C592	I5	L501	L5	R235	M8	R513	J6	R603	06	TP555	L5
		C276	J7	C520	K3	C597	L5	L502	M3	R236	M8	R514	J5	R604	06	TP558	L8
		C277	J7	C521	L4	C5A1	I4	L503	N3	R237	M7	R515	K3	R605	06	TP+ALE	J3
		C278	J7	C522	L4	C5A2	I4	L504	I4	R238	M7	R516	K3	R606	06	TP+MA11	L4
		C279	K7	C523	L4	C5C1	M6	L505	K2	R239	M7	R517	K3	R607	05	TP+RRPQ	05
		C280	K7	C524	L4	C5C2	M6	L506	M3	R240	M7	R518	K3	R608	04	TP+SPDIF	05
		C281	L7	C525	L4	C5C3	M6	L507	M2	R241	M7	R519	K3	R609	04	TP+URD#	K3
		C282	J8	C526	L5	C5C4	M6	L508	M4	R242	M7	R520	L4	R610	04	TP+UWR#	K3
		C283	K8	C527	L5	C5C5	N6	L5C1	M7	R243	M7	R521	L3	R611	04	X501	K6
		C291	J7	C528	L6	C5C6	N6	L601	N9	R244	M7	R522	L3	R612	05	ZD501	N2
		C292	J8	C529	L5	C5C7	N6	L602	04	R245	L7	R523	N3	R6C1	N8		
		C293	K7	C530	K5	C5C8	M6	L613	K6	R246	M7	R524	N3	R6C2	N8		
		C295	J8	C531	K5	C5C9	N6	PDM01	L9	R251	K8	R525	K3	R6C3	N7		
		C296	N8	C532	K5	C5E0	M7	PDM02	M9	R252	K7	R526	I5	R6C4	N7		
		C297	N8	C533	K6	C601	09	PDV01	09	R253	J7	R527	I5	R6C5	N8		

MEMO

MEMO

SECTION 4 MECHANISM OF VCR PART

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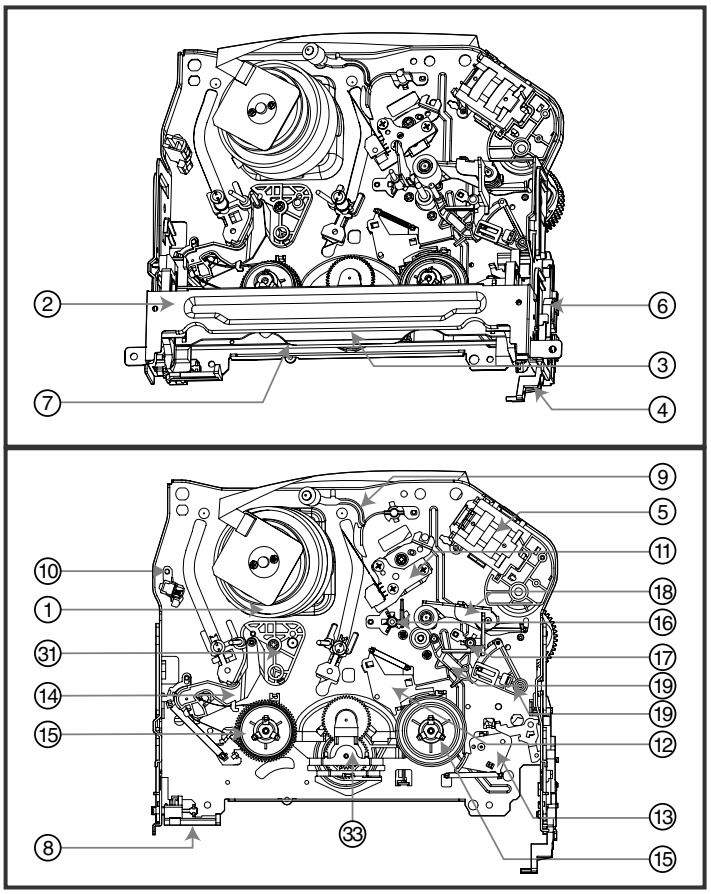
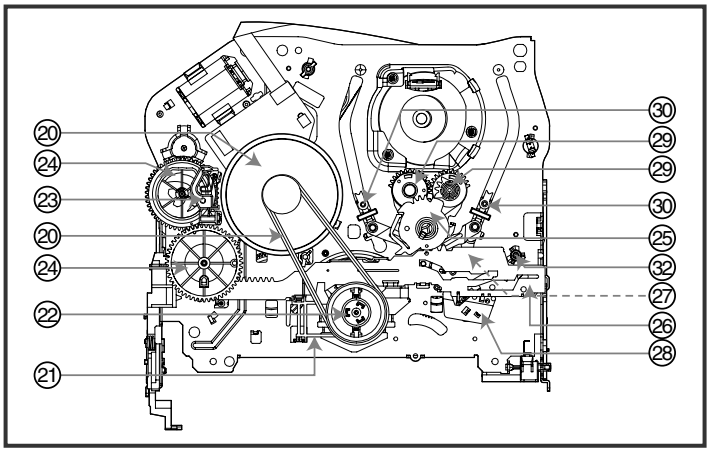
DECK MECHANISM PARTS LOCATIONS

• Top View



• Bottom View



NOTE: When reassembly perform the procedure in the reverse order.

1) When reassembling, confirm Mechanism and Mode Switch Alignment Position (Refer to Page 4-14)
2) When disassembling, the Parts in the "Starting No." colum should be removed first.

Procedure / Starting No.		Part	Fixing Type	Figure	
	1	Drum Assembly	3 Screw	A-1	T
	2	Top Plate Assembly	2 Hook	A-2	T
2	3	CST Holder Assembly	Chassis Hole	A-2	T
2	4	Door Opener	Chassis Hole	A-2	T
	5	L/D Motor Bracket Assembly	3 Hook	A-2	T
2,3,4	6	F/L Gear Rack	1 Hook, Chassis Hole	A-2	T
2,3,4,6	7	F/L Arm Assembly	Chassis Hole	A-2	T
	8	S/W Lever Assembly	1 Hook	A-2	T
	9	Cleaner Arm Assembly	Chassis Embossing	A-3	T
	10	F/E Head	Chassis Embossing	A-3	T
	11	A/C Head Base Assembly	1 Screw	A-3	T
2,3	12	T Brake Assembly	1 Hook	A-4	T
2,3	13	RS Brake Assembly	1 Hook	A-4	T
2,3	14	Tension Arm Assembly	2 Hook	A-4	T
2,3,12,13, 14	15	S Reel / T Reel		A-4	T
	16	P4 Base Assembly	Chassis Embossing	A-5	T
	17	Lid Opener	Chassis Embossing	A-5	T
17	18	Pinch Arm Assembly	Shaft	A-5	T
17	19	T/up / Arm T/up Lever	1 Hook	A-5	T
17,18	20	Capstan Belt /Capstan Motor	3 Screw	A-6	B
	21	F/R Lever	Locking Tab	A-6	B
20, 21	22	D35 Clutch Assembly	Washer	A-6	B
	23	Capstan Brake Assembly	Locking Tab	A-6	B
	24	Drive Gear / Cam Gear	Washer/Hook	A-7	B
	25	Sector Gear	1 Hook	A-7	B
20,21,23, 24,25	26	Slider Plate	Shaft Guide	A-7	B
20,21,23, 24,25,26	27	Tension Lever	1 Hook	A-7	B
2,3,14,20, 21,25,23, 24,26	28	Spring Lever	Locking Tab	A7	B
25	29	P2 Gear Assembly/P3 Gear Assembly	Boss	A-8	B
2,3,14,25, 29	30	P2 Base Assembly/P3 Base Assembly	Chassis Slot	A-8	B
2,3,14,25, 29	31	Loading Base	1 Screw	A-9	T
2,3,14	32	Tension Base	Chassis Embossing	A-9	B
2,3,20,21, 22	33	Idler Arm Jog Assembly	Locking Tab	A-9	T

R: Top, B:Bottom

DECK MECHANISM DISASSEMBLY

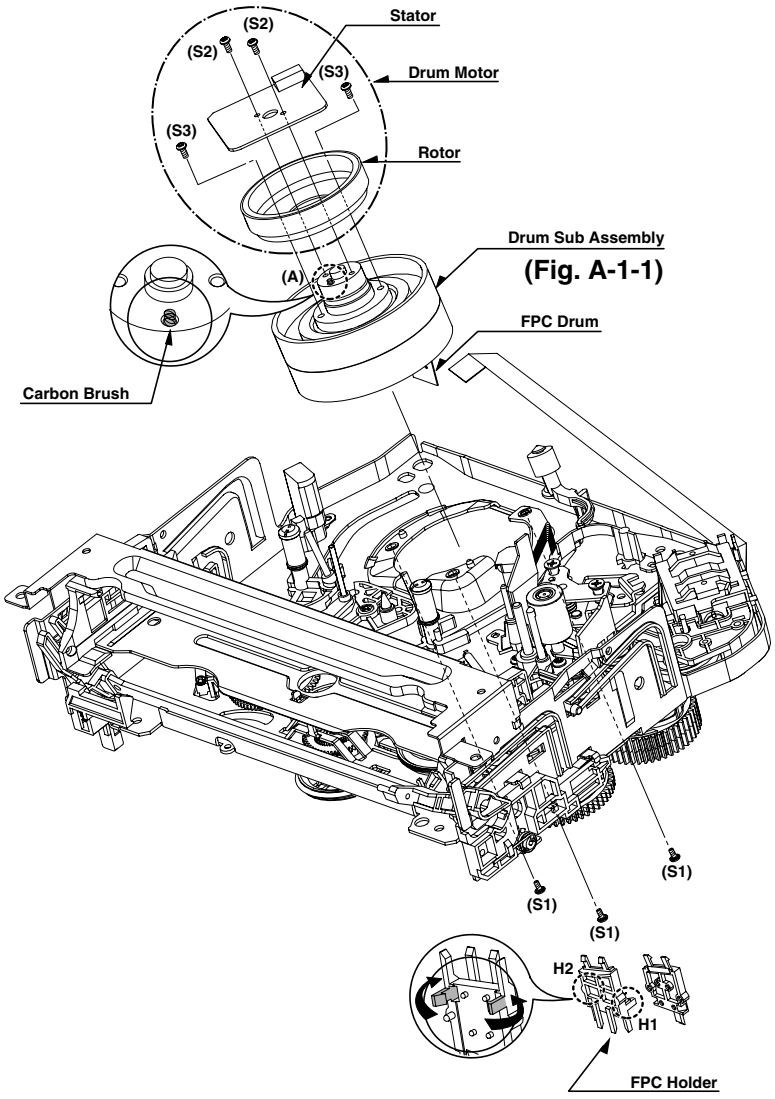


Fig. A-1

1. Drum Assembly (Fig. A-1-1)

1) Unplug the FPC Drum Connector.
2) Remove three Screws (S1) on the bottom side and separate the Drum assembly.
3) Unhook (H1), (H2) and separate the FPC Holder and FPC Cap. (See Fig. B-1)

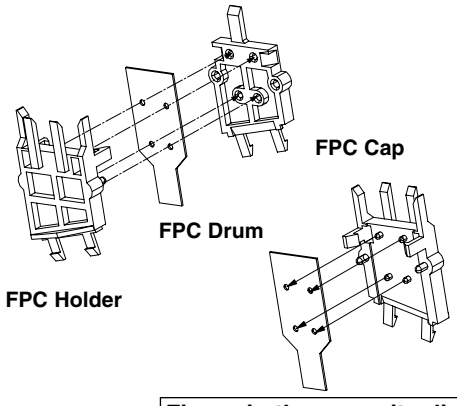
1-1. Drum Motor

1) Remove two Screws (S2) and disassemble the Stator of the Drum Motor.
(2) Remove two Screws (S3) and separate the Rotor of the Drum Motor from the Drum Sub assembly.

NOTE

When reassembling, check to ascertain that the Carbon Brush is in position.

(Fig. B-1)



DECK MECHANISM DISASSEMBLY

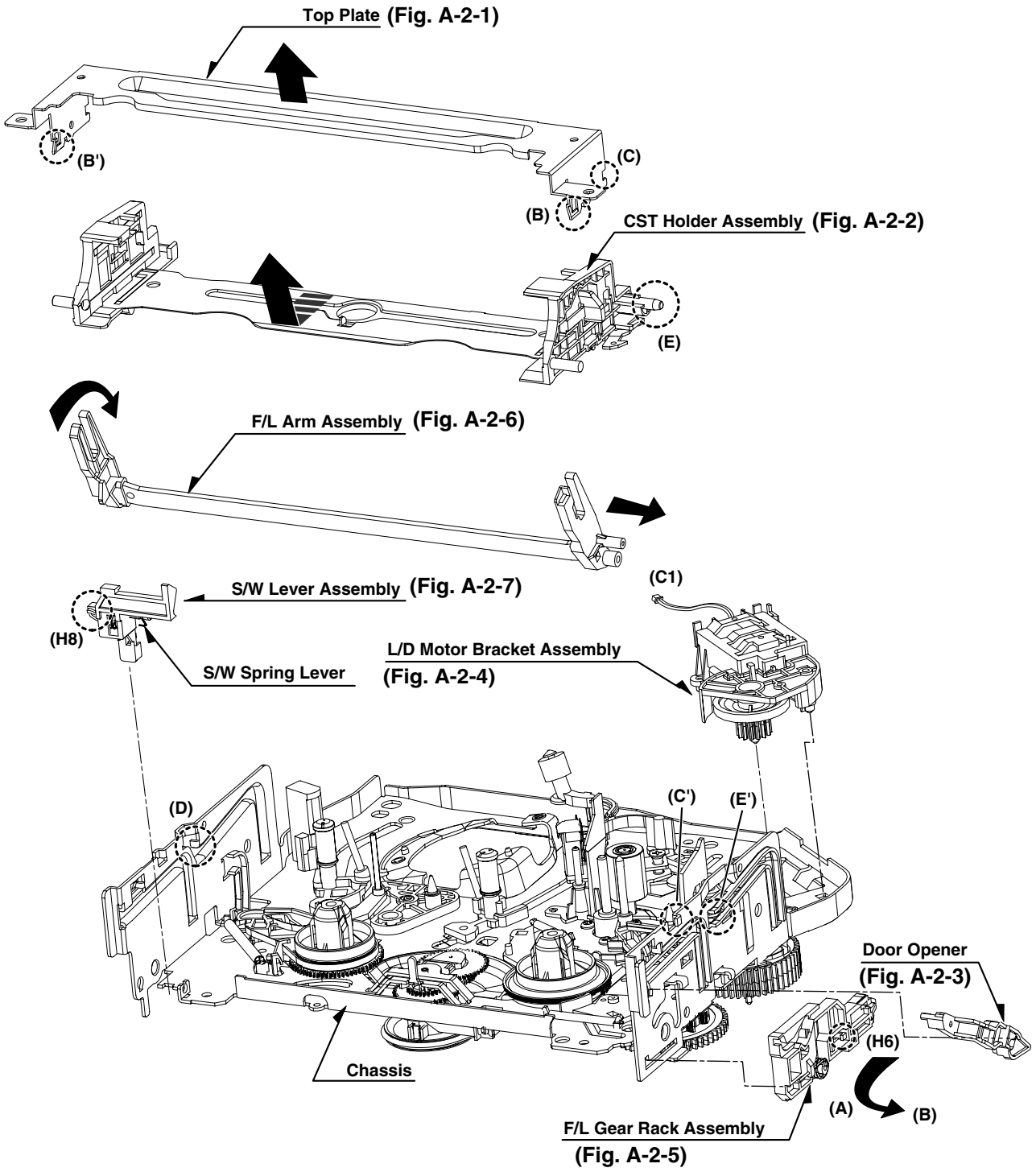


Fig. A-2

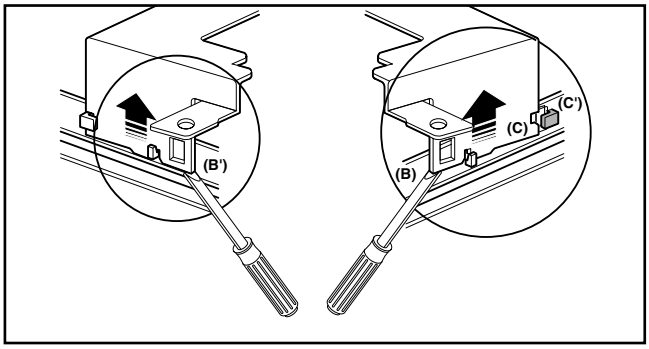
DECK MECHANISM DISASSEMBLY

2. Top Plate Assembly (Fig. A-2-1)

1) Pull the (B) portion of the Top Plate back in direction of arrow and separate the right side of it.
2) Pull the (B') portion of the Top Plate back in direction of arrow and separate the left side of it.
   (Tools: (-) Flat type screwdriver or any tool with a sharp or flat point.)

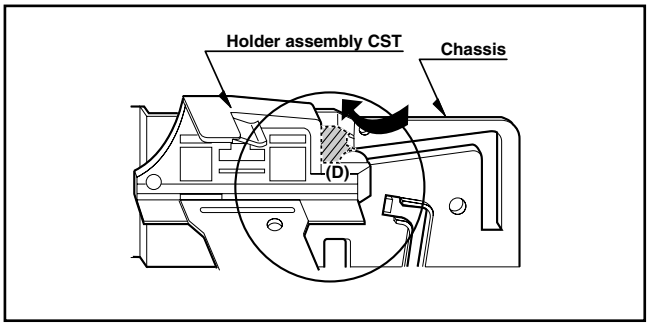
NOTE

(1) When reassembling, push the Top Plate on after aligning the two position (C), (C') as Fig.



3. CST Holder Assembly (Fig.A-2-2)

1) Move the CST Holder Assembly in direction of arrow and separate the left side of it first through the (D) position of the Chassis.



2) Disassemble the right side of the CST Holder Assembly from each guided hole of the Chassis.

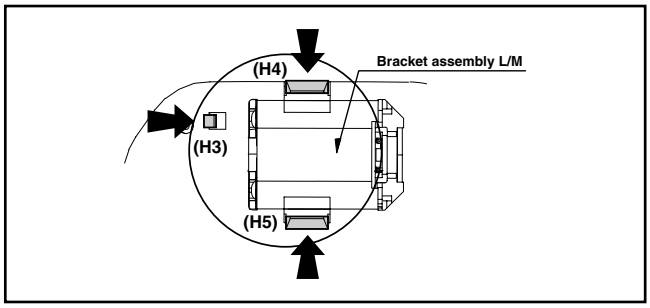
NOTE

When reassembling, insert the (E) part of the CST Holder assembly in the (E') hole of the Chassis first and assemble the left side of it.

4. Door Opener (Fig.A-2-3)

5. L/D Motor Bracket Assembly (Fig. A-2-4)

1) Unplug the Connector (C1).
2) Unhook three Hooks (H3, H4, H5) on thr bottom side of the Chassis, lift up the L/M Bracket Assembly and disasemble the L/D Motor Bracket Assembly.

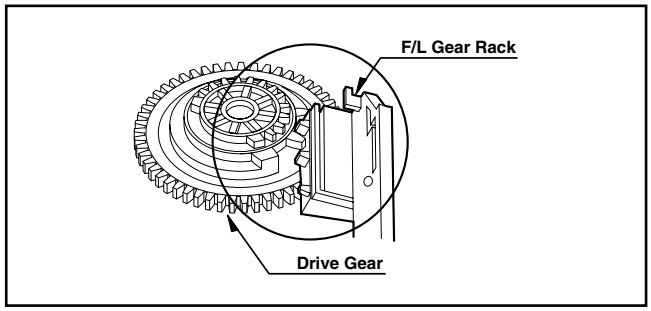


6. F/L Gear Rack (Fig. A-2-5)

1) Move the F/L Gear Assembly Rack in the direction of arrow (A) and unhook the Hook (H6) pulling back in front.
2) Separate the F/L Rear Rack in direction of arrow (B).

NOTE

When reassembling, align the Gear part of the Gear F/L Assembly Rack with the Drive Gear as below Fig.

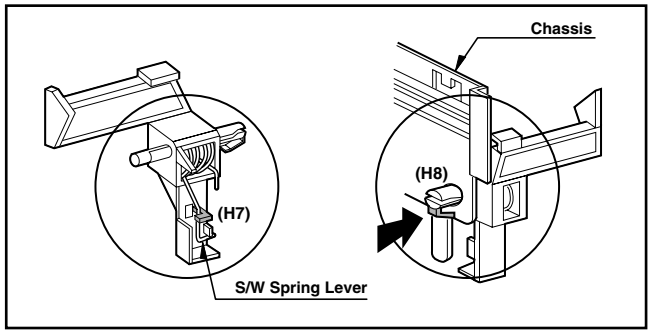


7. F/L Arm Assembly (Fig. A-2-6)

1) Move the F/L Arm Assembly in direction of arrow and separate the left side of it first.
2) Disassemble the F/L Arm Assembly from each guided Holes in of the Chassis.

8. S/W Lever Assembly (Fig. A-2-7)

1) Hook the S/W Spring Lever on the Hook (H7) first as shown below.
2) Unhook the Hook (H8) in the left side of the Chassis and move the S/W Lever Assembly.



DECK MECHANISM DISASSEMBLY

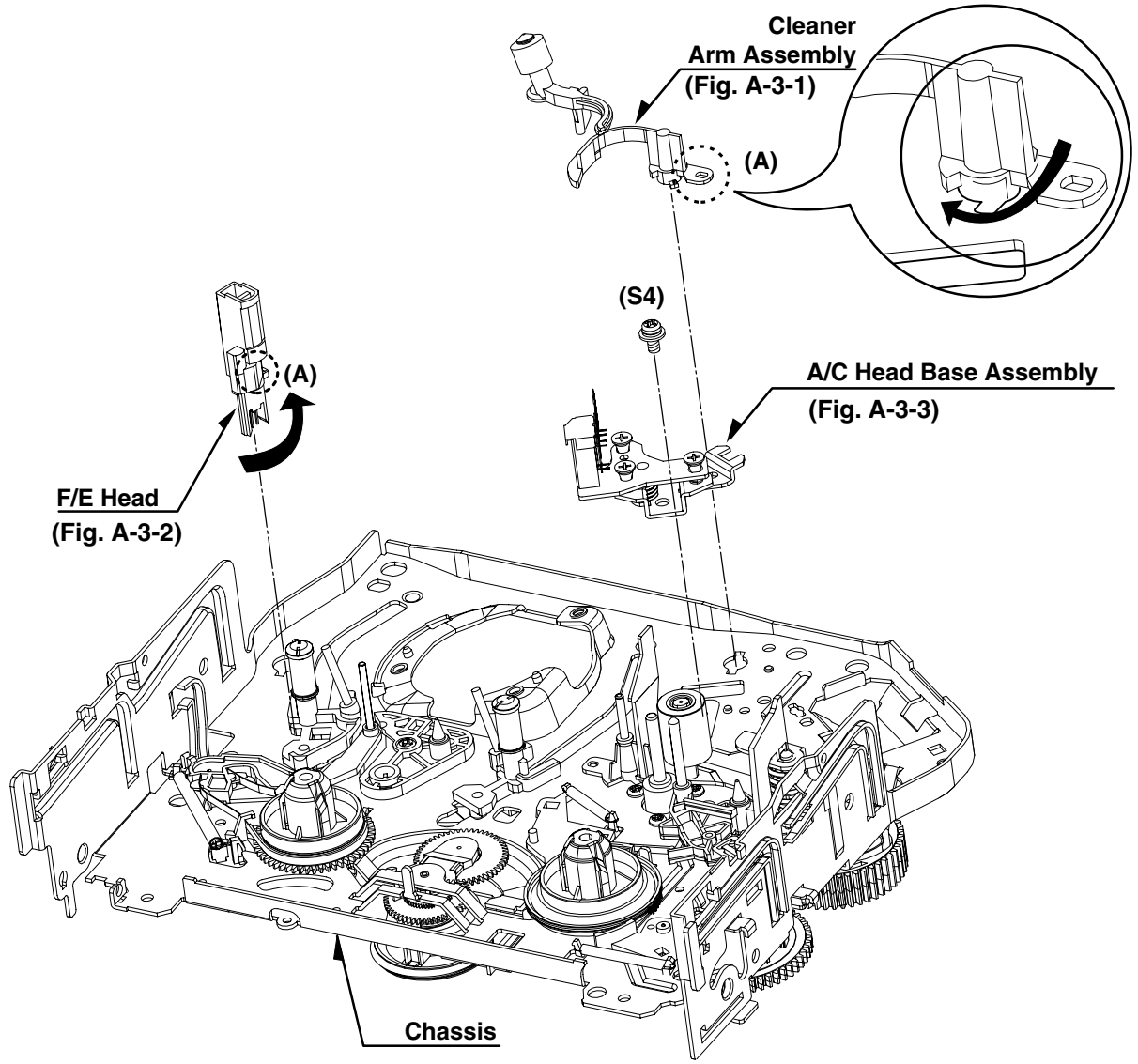


Fig. A-3

9. Cleaner Arm Assembly (Fig. A-3-1)

1) Carefully pry tab "A" (see Fig.A-3-1) to clear the embossed tab on the chassis. Turn the Cleaner Arm Assembly clockwise and lift it from the chassis.

10. F/E Head (Fig. A-3-2)

1) Carefully pry tab "A" (see Fig.A-3-2) to clear the embossed tab on the chassis. Turn the Cleaner Arm Assembly counter-clockwise and lift it from the chassis.

11. A/C Head Base Assembly (Fig. A-3-3)

1) Remove the Screw (S4) and lift the A/C Head Base Assembly up.

DECK MECHANISM DISASSEMBLY

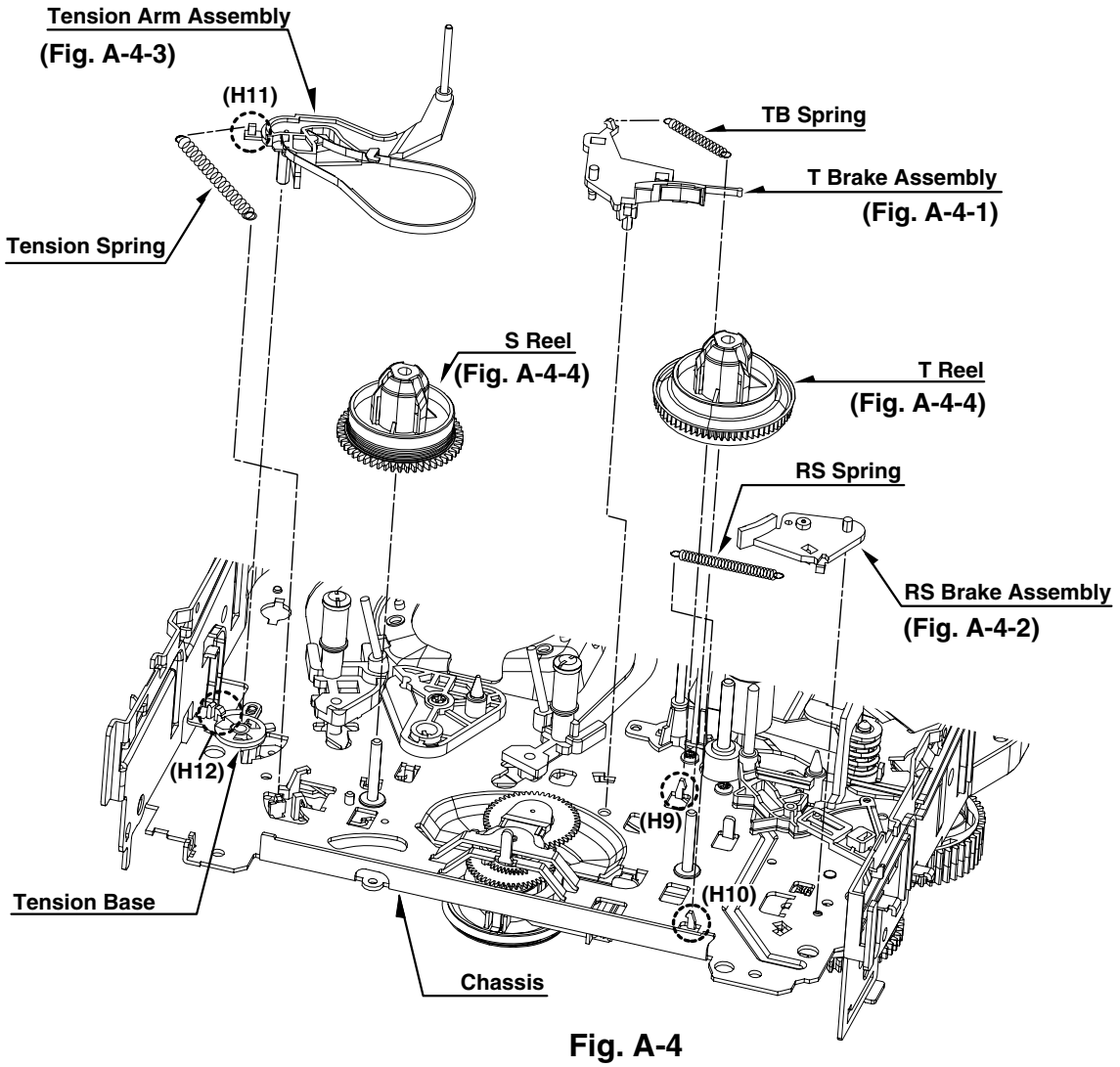


Fig. A-4

12. T Brake Assembly (Fig. A-4-1)

1) Unhook the TB Spring from the Hook (H9) of the Chassis.
2) LLift the T Brake Assembly up.

13. RS Brake Assembly (Fig. A-4-2)

1) Unhook the RS Spring from the Hook (H10) of the Chassis.
2) Lift the T Brake Assembly up.

14. Tension Arm Assembly (Fig. A-4-3)

1) Unhook the Tension Spring from the Hook (H11) of the Tension Arm Assembly.
2) Unhook the Hook (H12) of the Tension Base and lift the Tension Arm Assembly up.

NOTE

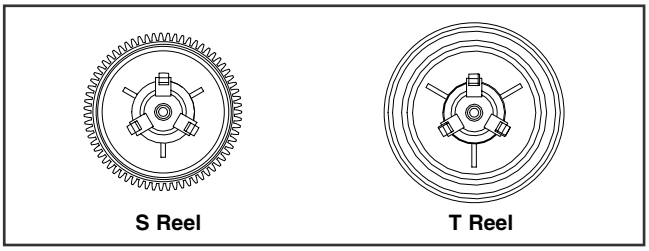
Difference for Springs

(Difference for Springs)

	TB Spring	
	RS Spring	**Color (Black)**
	Tension Spring	

15. S Reel / T Reel (Fig. A-4-4)

1) Difference for S Reel / T Reel



DECK MECHANISM DISASSEMBLY

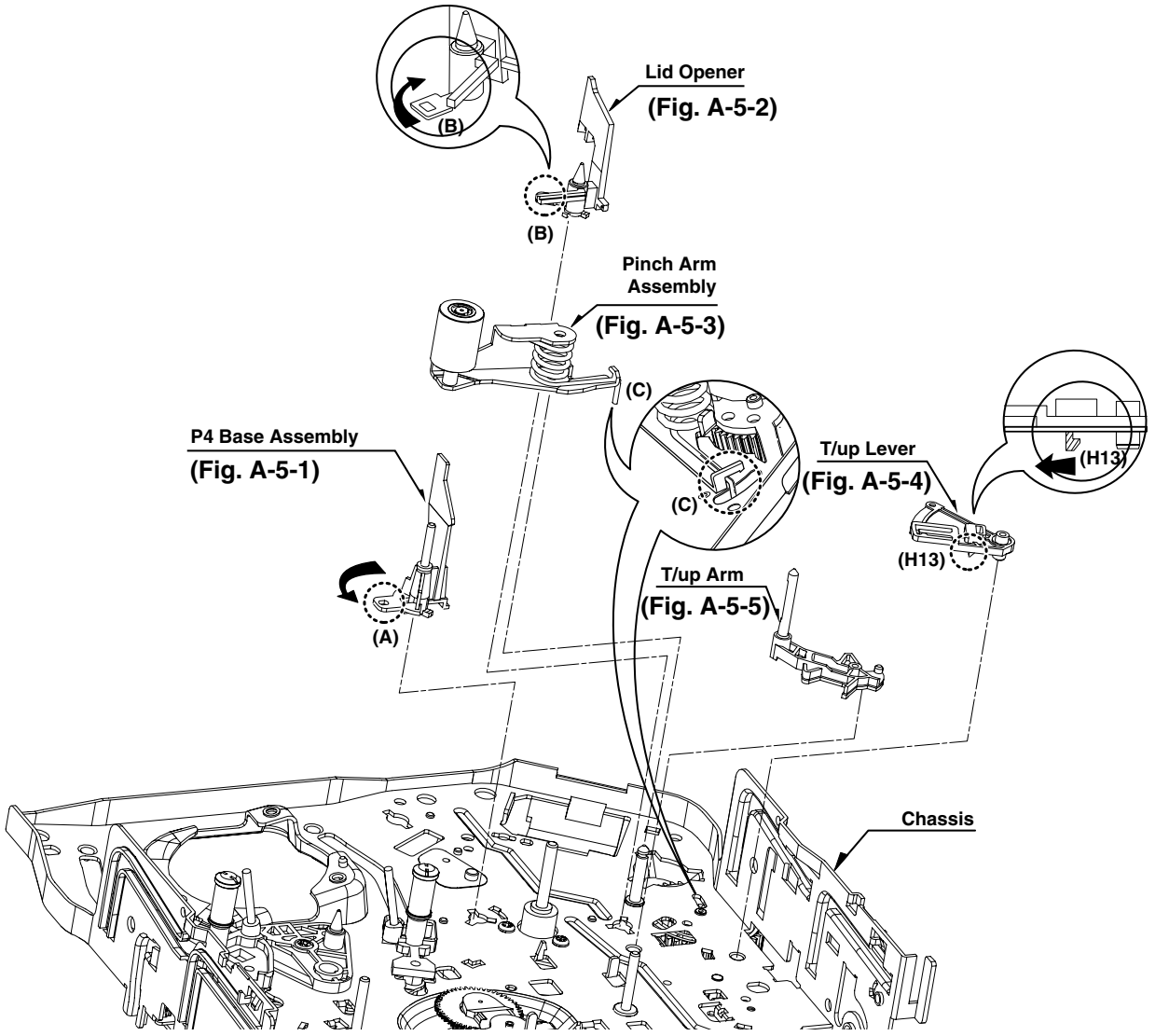


Fig. A-5

16. P4 Base Assembly (Fig. A-5-1)

1) Carefully pry the (A) portion of the P4 Base Assembly from the Embossing of the Chassis.
2) Turn the P4 Base Assembly counterclockwise and lift it up.

17. Lid Opener (Fig. A-5-2)

1) Carefully pry the (B) portion of the Lid Opener from the Embossing of the Chassis.
2) Turn the Lid Opener to clockwise direction and lift it up.

18. Pinch Arm Assembly (Fig. A-5-3)

1) Lift the Pinch Arm Assembly up.

19. T/up (Fig. A-5-4)/ Arm T/up Lever (Fig. A-5-5)

1) Unhook the Hook (H13) of the bottom Chassis and lift the T/up Lever up.
2) Lift the T/up Arm up.

NOTE

When reassembling, confirm the (C) portion of the Pinch Arm Assembly is inserted in the Chassis Hole correctly.

Place the Mechanism face down, or up side down.

DECK MECHANISM DISASSEMBLY

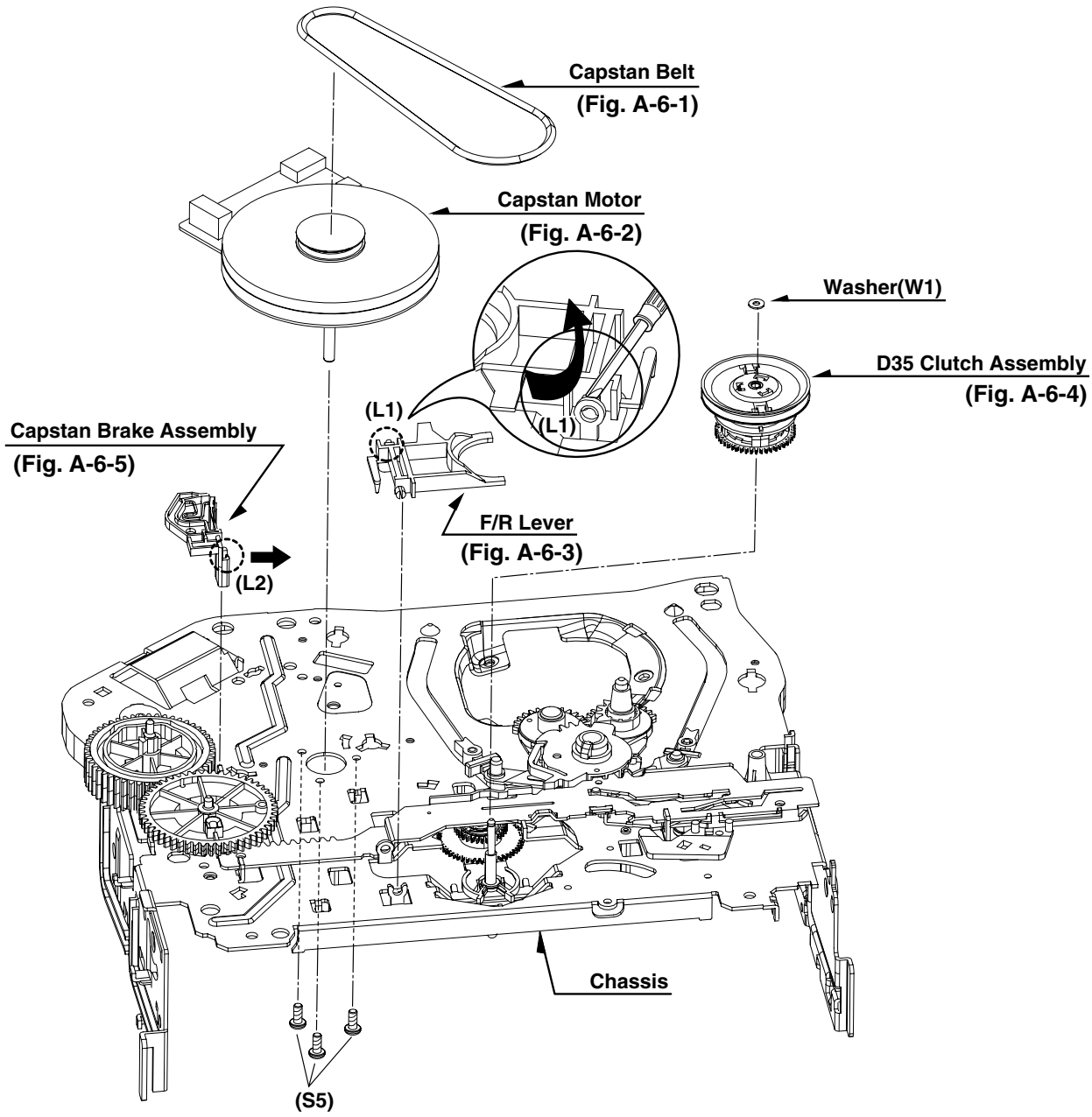


Fig. A-6

20. Capstan Belt (Fig. A-6-1)/ Capstan Motor (Fig. A-6-2)

1) Remove the Capstan Belt..
2) Remove the three Screws (S5) from the bottom of the Chassis and lift the Capstan Motor up.

21. F/R Lever (Fig. A-6-3)

1) Unlock the Locking Tab (L1) as Fig. A-6-3 and lift the F/R Lever up.

22. D35 Clutch assembly (Fig. A-6-4)

1) Remove the Washer (W1) and lift the D35 Clutch Assembly up.

23. Capstan Brake Assembly (Fig. A-6-5)

1) Pull the Locking Tab (L2) back in the direction of the arrow and lift it up.

DECK MECHANISM DISASSEMBLY

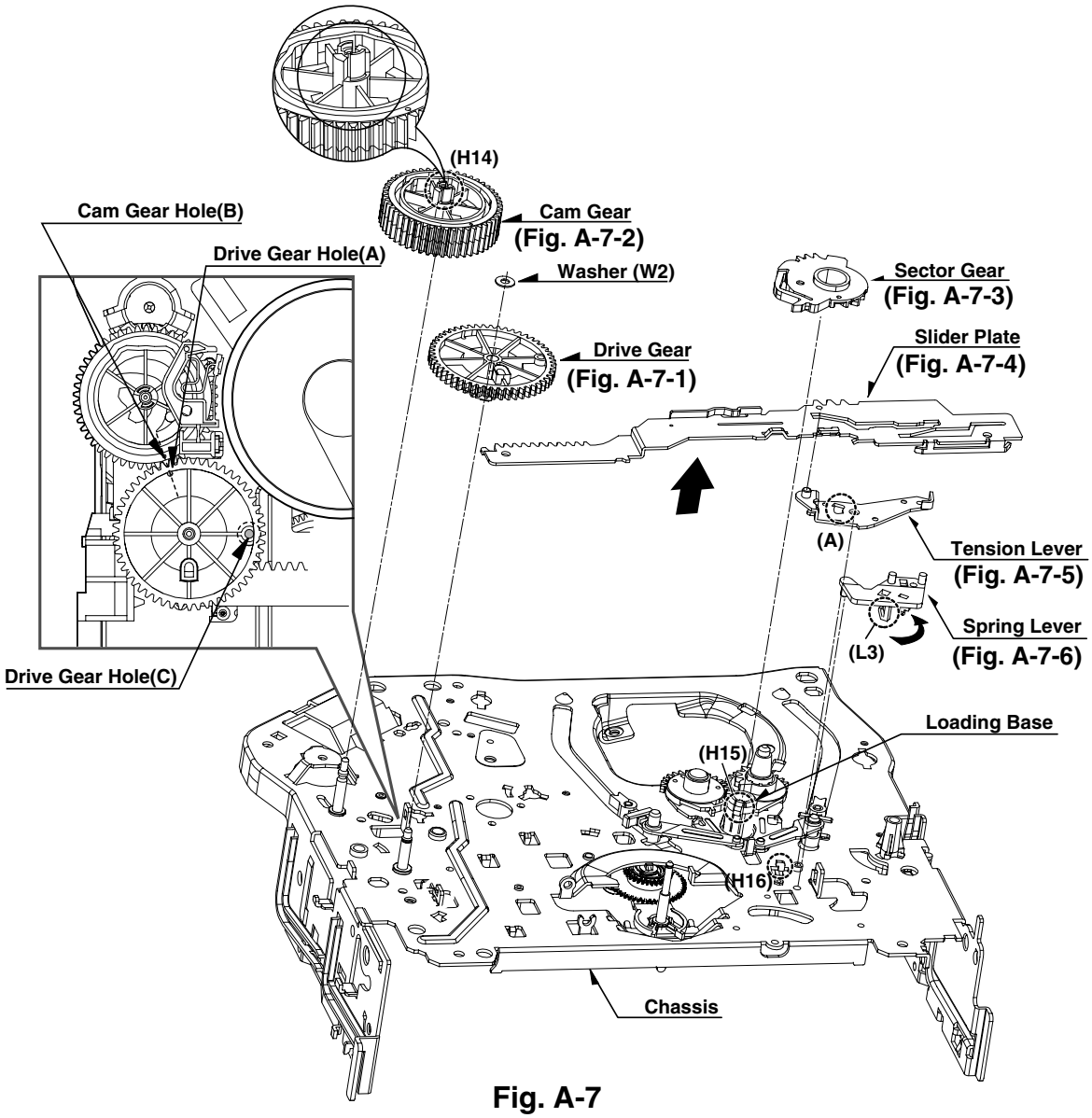


Fig. A-7

24. Drive Gear (Fig. A-7-1)/ Cam Gear (Fig. A-7-2)

1) Remove the Washer (W2) and lift the Drive Gear up.
2) Unhook the Hook (H14) of the Cam Gear and lift the Cam Gear up.

NOTE

When reassembling, align the Drive Gear Hole (A) and the Cam Gear Hole (B) in a straight line after the Drive Gear Hole (C) is aligned with the Chassis Hole.

25. Sector Gear (Fig. A-7-3)

1) Unhook the Hook (H15) of the Loading Base on bottom Chassis and lift the Sector Gear up.

26. Slider Plate (Fig. A-7-4)

1) Lift the Slider Plate up.

27. Tension Lever (Fig. A-7-5)

1) Unhook the (A) portion of the Tension Lever from the Hook (H16) of the Chassis.
2) Turn the Tension Lever counterclockwise and lift it up.

28. Spring Lever (Fig. A-7-6)

1) Unlock the Locking Tab (L3) from the bottom of the Chassis and lift the Spring Lever up.

DECK MECHANISM DISASSEMBLY

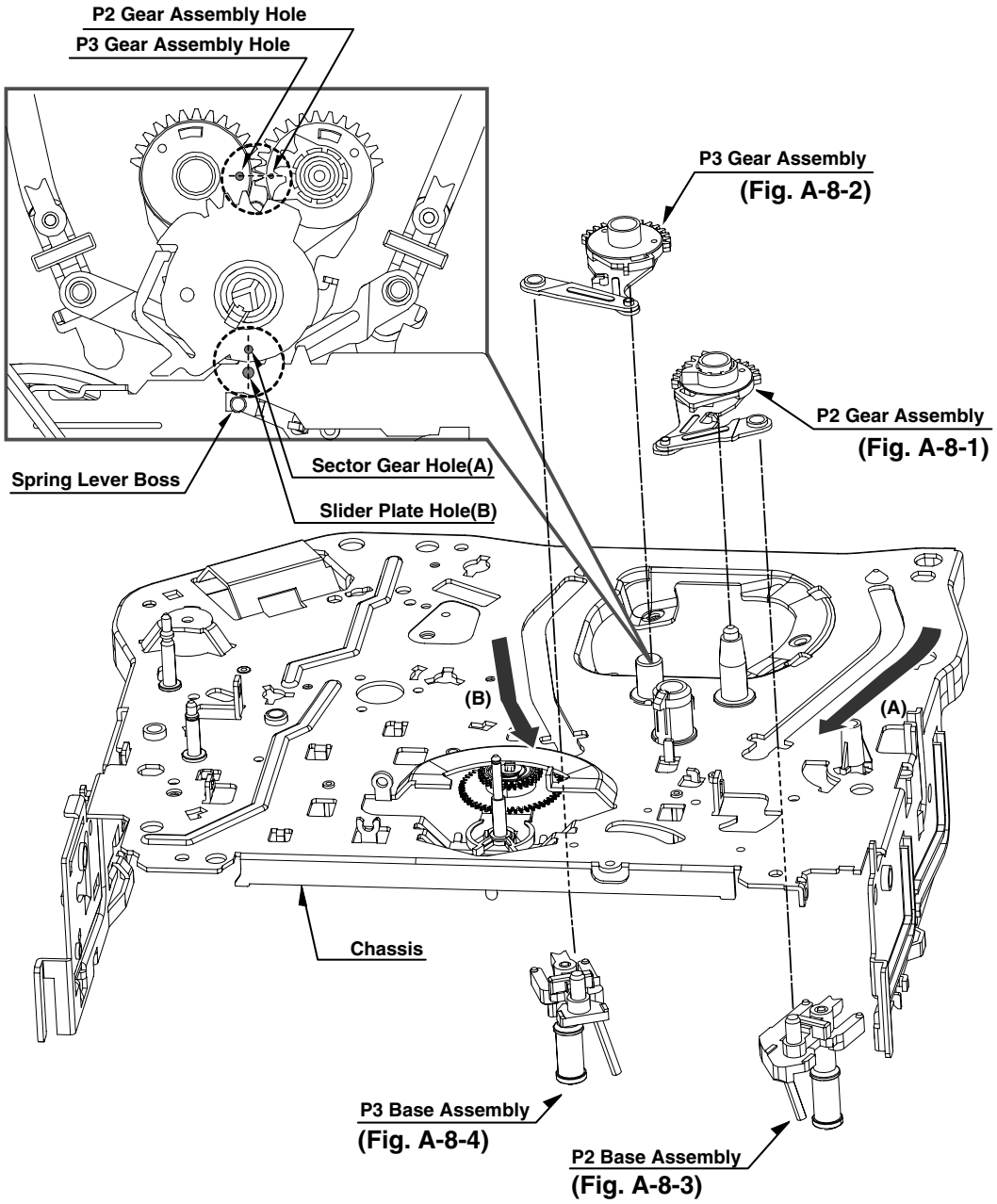


Fig. A-8

29. P2 Gear Assembly (Fig. A-8-1)/ P3 Gear Assembly (Fig. A-8-2)/

1) Lift the P2 Gear Assembly up.
2) Lift the P3 Gear Assembly up.

NOTE

When reassembling, align the two Holes of the P2 and P3 Gear Assembly in a straight line after confirming the Sector Gear Hole (A) and the Slider Plate Hole (B) are aligned as in the above Fig.

30. P2 Base Assembly (Fig. A-8-3)/ P3 Base Assembly (Fig. A-8-4)

1) Move the P2 Base Assembly in the direction of the arrow (A) along the slot of the Chassis and disassemble it from the bottom side.
2) Move the P3 Base Assembly in the direction of the arrow (B) along the slot of the Chassis and disassemble it from the bottom side.

Place the Mechanism face up, or return to it's original position.

DECK MECHANISM DISASSEMBLY

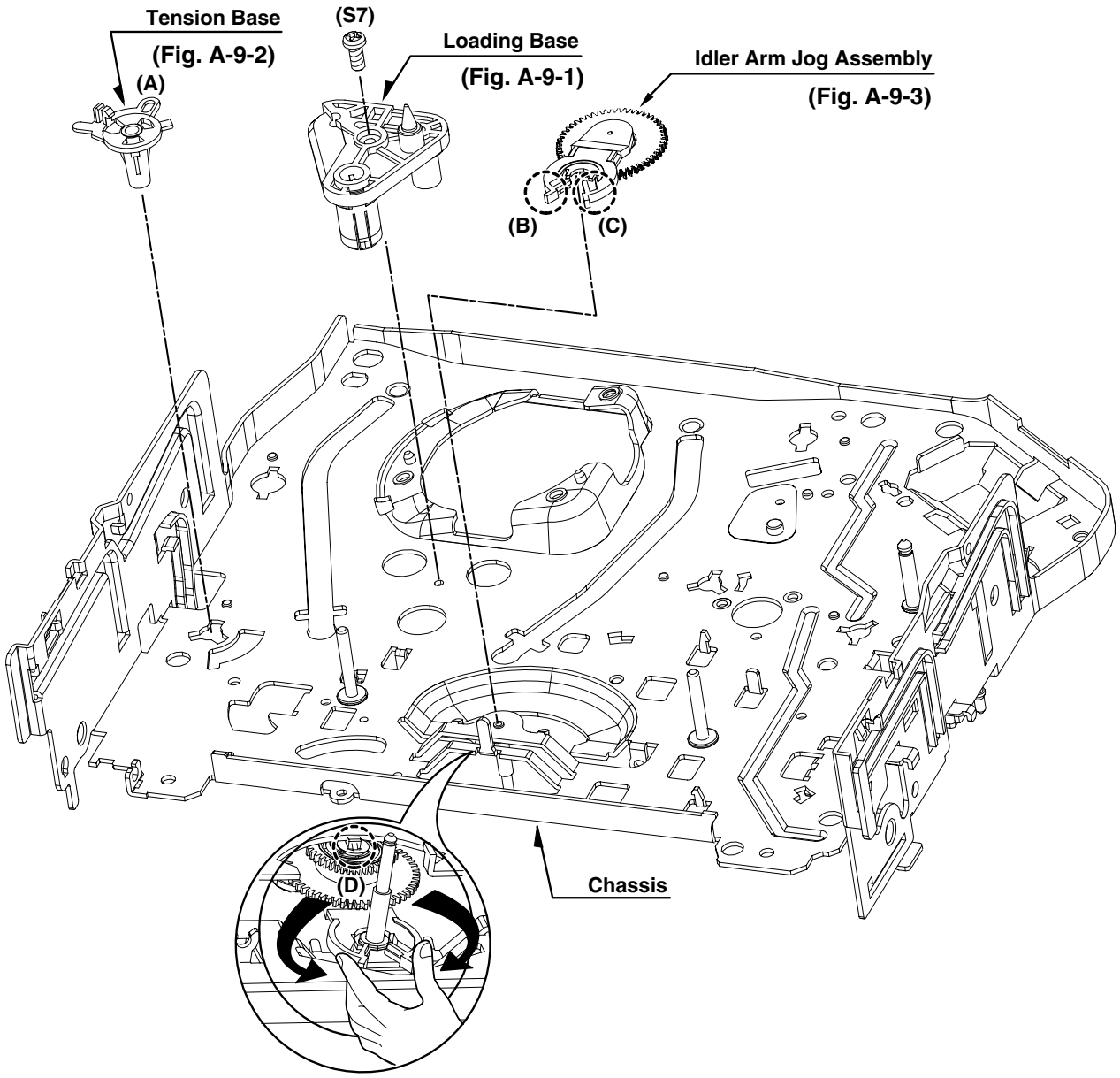


Fig. A-9

31. Loading Base (Fig. A-9-1)

1) Remove the Screw (S7).
2) Lift the Loading Base up.

32. Tension Base (Fig. A-9-2)

1) Remove the (A) portion of the Tension Base from the Embossing of the Chassis.
2) Turn the Tension Base counterclockwise and lift it up.

33. Idler Arm Jog Assembly (Fig. A-9-3)

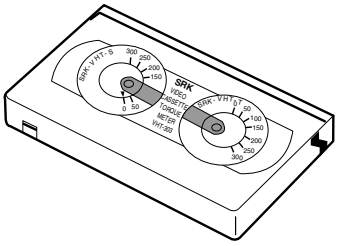
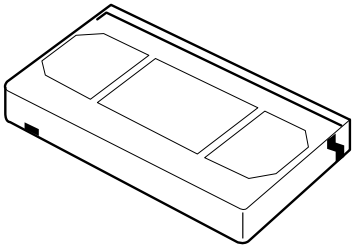
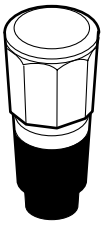
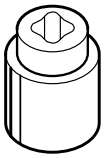
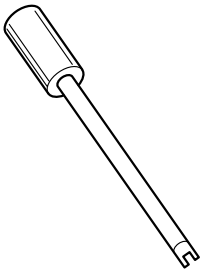
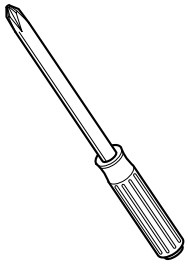
1) Pinch (B) and (C), as shown in Fig. A-9-3.
2) Lift the Idler Arm Assembly up.

NOTE

When disassembling, be careful not to catxh part (D) on the Chassis (see inset).

DECK MECHANISM DISASSEMBLY

• Tools and Fixfures for Service

1. Cassette Torque meter **SRK-VHT-303 (Not SVC part)** **Part No: D00-D006** 	**2. Alignment tape** **Part No NTSC: DTN-001** **PAL:DTN-0002** 	**3. Torque gauge** **600g.Cm ATG** **Part No:D00-D002** 
4. Torque gauge adaptor **Part No:D09-R001** 	**5. Post height adjusting driver** **Part No:DTL-0005** 	**6. + Type driver (ø 5)** 

DECK MECHANISM ADJUSTMENT

1. Mechanism Alignment position Check

Purpose:To determine if the Mechanism is in the correct position, when a Tape is ejected.

Test Equipment/ Fixture	Test Conditions (Mechanism Condition)	Check Point
• Blank tape	• Eject Mode (with Cassette ejected)	• Mechanism and Mode Switch Position

1) Turn the Power S/W on and eject the Cassette by pressing the Eject Button.
2) Remove the Top Cover and Top Plate Assembly, visually check if the Cam Gear Hole is aligned with the Chassis Hole as below Fig. C-2.
3) If not, rotate the Shaft of the Loading Motor Clockwise or Counterclockwise until the Alignment is as shown below in Fig. C-2.
4) Remove the Screw which attaches the Deck Mechanism and Main Frame, confirm the Cam Gear is aligned with the Drive Gear as shown below in Fig. C-1 (A).
5) Confirm if the Mode S/W on the Main P.C. Board is aligned as shown below in Fig. C-1 (B).
6) Remount the Deck Mechanism on the Main P.C. Board and check each operation.

CHECK DIAGRAM

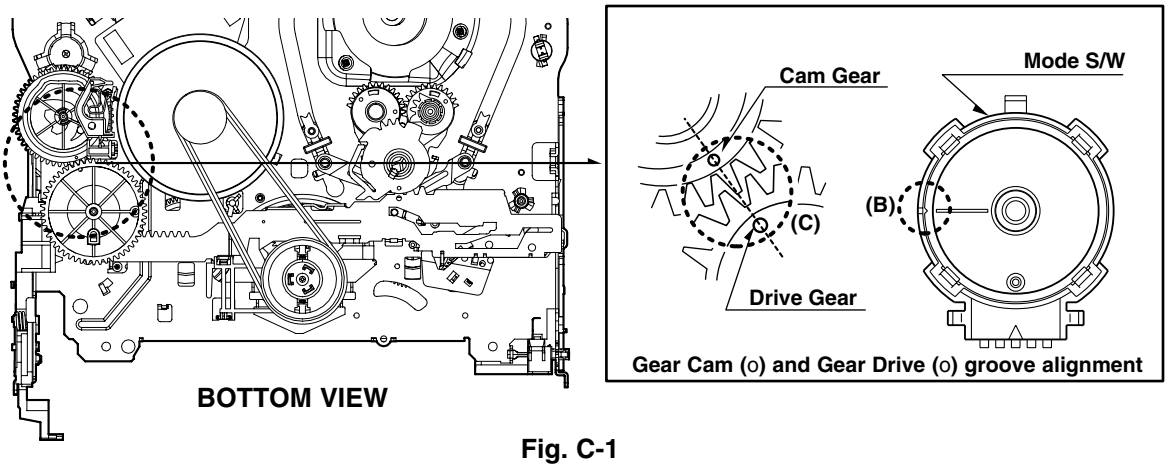


Fig. C-1

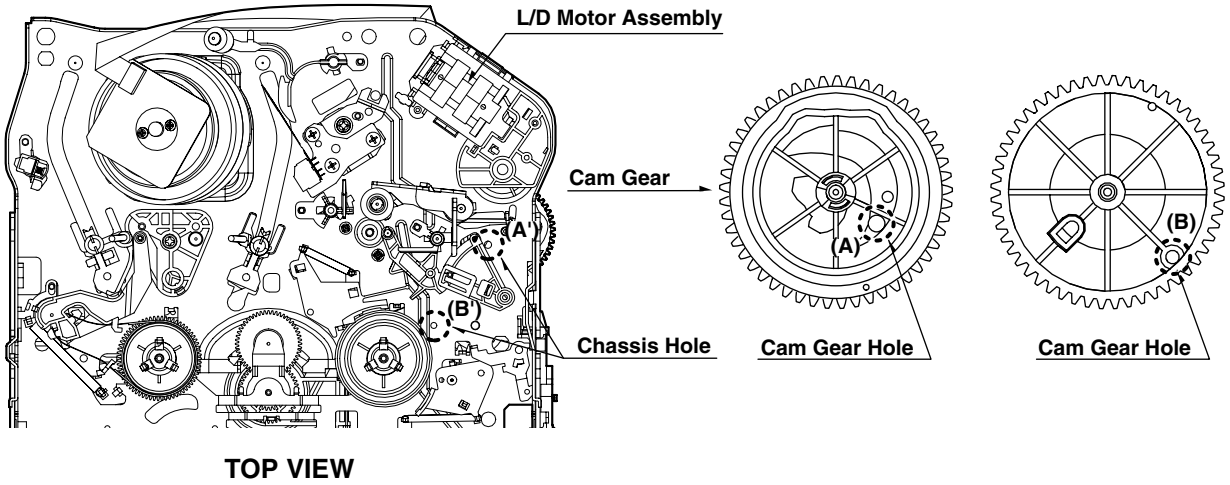


Fig. C-2

DECK MECHANISM ADJUSTMENT

2. Preparation for Adjustment (To set the Deck Mechanism to the Loading state without inserting a Cassette Tape).

1) Unplug the Power Cord from the AC Outlet.
2) Disassemble the Top Cover and Top Plate Assembly.
3) Plug the Power Cord into the AC Outlet.
4) Turn the Power S/W. Push the Stop Lever of the CST Holder Assembly to the back for Loading without the Tape.
   Cover the Holes of the End Sensors at the both sides of the (L) Side Bracket and Door Bracket Assembly to prevent sensing light.
   Then The Deck Mechanism drives to the Stop Mode.
   In this case, The Deck Mechanism can accept inputs of each mode, however the Rewind and Review Operation can not be performed for more than a few seconds because the Take-up Reel Table is in the Stop Mode and can not detect the Reel Pulses.

3. Checking Torque

Purpose: To insure smooth Transport of the Tape during each Mode of Operation.
If the Tape Transport is abnormal, then check the Torque as indicated by the chart below.

Test Equipment/ Fixture	Test Conditions (Mechanism Condition)	Checking Method
• Torque Gauge (600g/cm ATG) • Torque Gauge Adaptor • Cassette Torque Meter SRK-VHT-303	• Play (FF) or Review (REW) Mode	• Perform each Deck Mechanism Mode without inserting a Cassette Tape (Refer to above No.2 Preparation for Adjustment). • Read the Measurement of the Take-up or Supply Reels on the Cassette Torque Meter (Fig. C-3-2). • Attach the Torque Gauge Adaptor to the Torque Gauge and then read the Value of it (Fig. C-3-1).

Item	Mode	Test Equipment	Measurement Reel	Measurement Values
Fast Forward Torque	Fast Forward	Cassette Torque Gauge	Take-Up Reel	More than 400g/cm
Rewind Torque	Rewind	Cassette Torque Gauge	Supply Reel	More than 400g/cm
Play Take-Up Torque	Play	Cassette Torque Meter	Take-Up Reel	40~100g/cm
Review Torque	Review	Cassette Torque Meter	Supply Reel	120~210g/cm

NOTE:

The Values are measured by using a Torque Gauge and Torque Gauge Adaptor with the Torque Gauge affixed.

• Cassette Torque Meter (SRK-VHT-303)

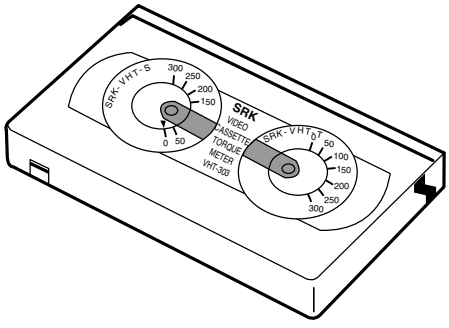


Fig. C-3-2

NOTE:

The Torque reading to measure occurs when the Tape abruptly changes direction from Fast Forward of Rewind Mode, when quick bracking is applied to both Reels.

• Torque Gauge (600g.cm ATG)

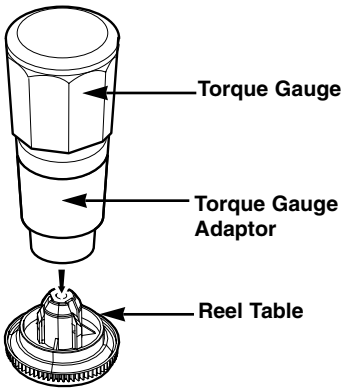


Fig. C-3-1

DECK MECHANISM ADJUSTMENT

4.Guide Roller Height Adjustment

Purpose: To regulate the Height of the Tape so that the Bottom of the Tape runs along the Tape Guide Line on the Lower Drum.

4-1. Preliminary Adjustment

Test Equipment/ Fixture	Test Conditions (Mechanism Condition)	Adjustment Point
• Post Height Adjusting Driver	• Play or Review Mode	• Guide Roller Height Adjustment screws on the Supply and Take-Up Guide Rollers.

Adjustment Procedure

1) Confirm that the Tape runs along the Tape Guide Line of the Lower Drum.
2) If the Tape runs at the Bottom of the Guide Line, turn the Guide Roller Height Adjustment Screw Clockwise.
3) If it runs at the Top, turn Counterclockwise.
4) Adjust the Height of the Guide Roller to be guided to the Guide Line of the Lower Drum from the Starting and Ending Point of the Drum.

ADJUSTMENT DIAGRAM

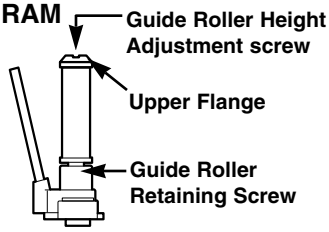


Fig. C-4-1

4-2. Precise Adjustment

Test Equipment/Fixture	Test Equipment Connection Points	Test Conditions VCR (VCP) State	Adjustment Point
• Oscilloscope • Alignment Tape • Post Height Adjusting Driver	• CH-1:PB RF Envelope • CH-2:NTSC: SW 30Hz PAL: SW 25Hz • Head Switching Output Point • RF Envelope Output Point	• Play an Alignment Tape	• Guide Roller Height Adjustment Screws

Adjustment Procedure

1) Play an Alignment Tape after connecting the Probe of the Oscilloscope to the RF Envelope Output Test Point and Head Switching Output Test Point.
2) Tracking Control (in PB Mode): Center Position (When this Adjustment is performed after the Drum Assembly has been replaced, set the Tracking Control so that the RF Output is Maximum).
3) Height Adjustment Screw: Flatten the RF Waveform. (Fig. C-4-2)
4) Turn (Move) the Tracking Control (in PB Mode) Clockwise and Counterclockwise. (Fig. C-4-3)
5) Check that any Drop of RF Output is uniform at the Start and End of the Waveform.

NOTE

If the adjustment is excessive or insufficient the tape will jam or fold.

Waveform Diagrams

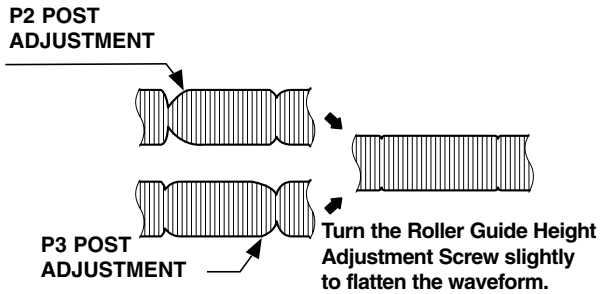


Fig. C-4-2

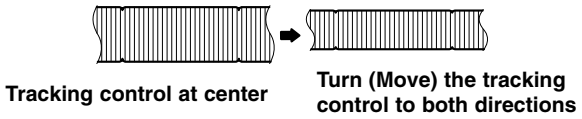
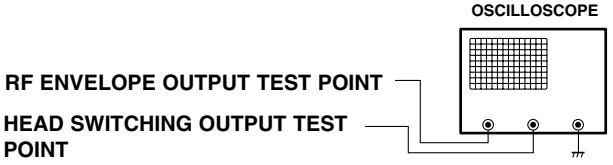


Fig. C-4-3

Connection Diagram



DECK MECHANISM ADJUSTMENT

5. Audio/Control (A/C) Head Adjustment

Purpose: To insure that the Tape's Audio and Control Tracks pass accurately over the head in exact alignment in both the Record and Playback Modes.

5-1. Preliminary Adjustment (Height and Tilt Adjustment)
Perform the Preliminary Adjustment, when there is no Audio Output Signal with the Alignment Tape.

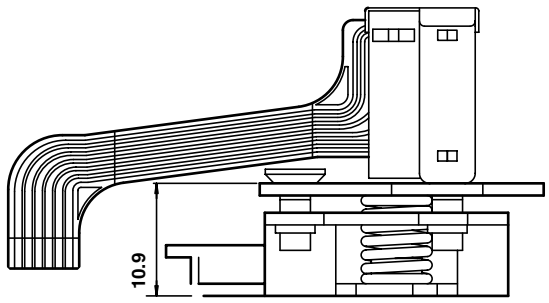
Test Equipment/ Fixture	Test Conditions (Mechanism Condition)	Adjustment Point
• Blank Tape • Screw Driver (+) Type 5mm	• Play the blank tape	• Tilt Adjustment Screw (C) • Height Adjustment Screw (B) • Azimuth Adjustment Screw (A)

Adjustment Procedure/Diagrams

1) Adjust the A/C Head Base Assembly as shown Fig. C-5-1 by using the Height Adjustment Screw (B).
2) Play a Blank Tape and observe if the Tape passes accurately over the A/C Head without the Tape Curling or Folding.
3) If Folding or Curling occurs adjust the Tilt Adjustment Screw (C) while the Tape is running to resemble Fig. C-5-3.
4) Reconfirm the Tape Path after playback of approximately 4~5 seconds.

NOTE

Ideal A/C head height occurs when the tape runs between 0.2~0.25mm above the bottom edge of the A/C head core.



A/C Head Base

Fig. C-5-1

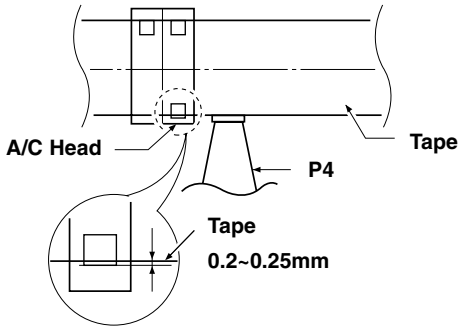
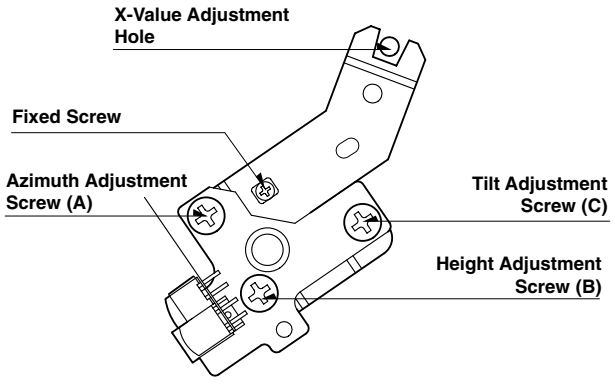


Fig. C-5-3



A/C Head Assembly

Fig. C-5-2

5-2. Confirm that the Tape passes smoothly between the Take-up Guide and Pinch Roller (using a Mirror or the naked eye).

1) After completing Step 5-1. (Preliminary Adjustment), check that the Tape passes around the Take-up Guide and Pinch Roller without Folding or Curling at the Top or Bottom.
   (1) If Folding or Curling is observed at the Bottom of the Take-up Guide then slowly turn the Tilt Adjustment Screw (C) in the Clockwise direction.
   (2) If Folding or Curling is observed at the Top of it then slowly turn the Tilt Adjustment Screw (C) in the Counterclockwise direction.

NOTE:

Check the RF Envelope after adjusting the A/C Head, if the RF Waveform differs from Fig. C-5-4, performs Precise Adjustment to flat the RF Waveform.

5-3. Precise Adjustment (Azimuth adjustment)

Test Equipment/ Fixture	Connection Point	Test Conditions (Mechanism Condition)	Adjustment Point
• Oscilloscope • Alignment Tape (SP) • Screw Driver (+) Type 5mm	• Audio output jack	• Play an Alignment Tape 1KHz, 7KHz Sections	• Azimuth Adjustment Screw (A) • Height Adjustment Screw (B)

Adjustment Procedure

1) Connect the Probe of the Oscilloscope to the Audio Output Jack.
2) Alternately adjust the Azimuth Adjustment Screw (A) and the Tilt Adjustment Screw (C) for Maximum Output of the 1Khz and 7Khz segments, while maintaining the flattest Envelope differential between the two Frequencies.

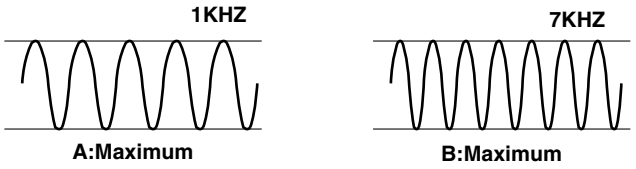
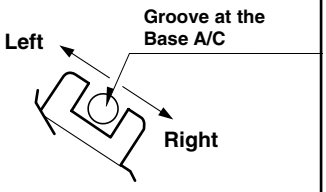


Fig. C-5-4

6. X-Value Adjustment

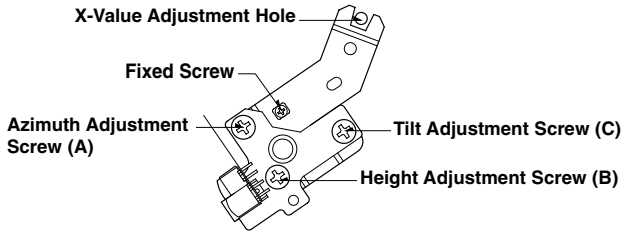
Purpose: To obtain compatibility with other VCR (VCP) Models.

Test Equipment/ Fixture	Connection Point	Test Conditions (Mechanism Condition)	Adjustment Point
• Oscilloscope • Alignment tape (SP only) • Screw Driver (+) Type 5mm	• CH-1: PB RF Envelope • CH-2: NTSC: SW 30Hz PAL: SW 25Hz • Head Switching Output Test Point • RF Envelope Output Test Point	• Play an Alignment Tape	

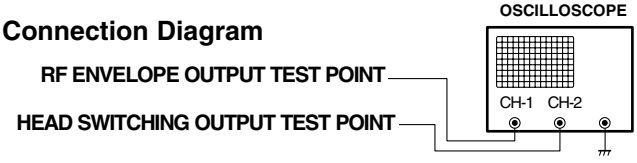
Adjustment Procedure

1) Release the Automatic Tracking to run long enough for Tracking to complete it's Cycle.
2) Loosen the Fixed Mounting Screw and move the A/C Head Base Assembly in the direction as shown in the Diagram to find the center of the peak that allows for the maximum Waveform Envelope.
   This method should allow the 31um Head to be centrally located over the 58um Tape Track.
3) Tighten the A/C Head Base Assembly mounting Screw.

Adjustment Diagram



Connection Diagram



DECK MECHANISM ADJUSTMENT

7. Adjustment after Replacing Drum Assembly (Video Heads)

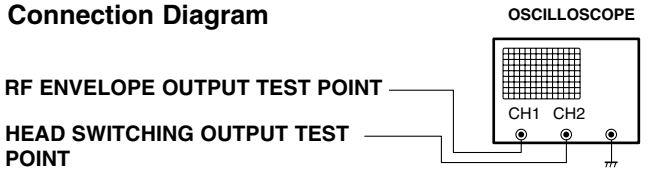
Purpose: To correct for shift in the Roller Guide and X value after replacing the Drum.

Test Equipment/ Fixture	Connection Point	Test Conditions (Mechanism Condition)	Adjustment Points
• Oscilloscope • Alignment tapes • Blank Tape • Post Height Adjusting Driver • Screw Driver (+) Type 5mm	• CH-1: PB RF Envelope • CH-2: NTSC: SW 30Hz PAL: SW 25Hz • Head Switching Output Test Point • RF Envelope Output Test Point	• Play the blank tape • Play an alignment tape	• Guide Roller Precise Adjustment • Switching Point • Tracking Preset • X-Value

Checking/Adjustment Procedure

Play a blank tape and check for tape curling or creasing around the roller guide. If there is a problem, follow the procedure 4. "Guide Roller Height" and 5. "Audio Control (A/C) Head Adjustment".

Connection Diagram



Waveform

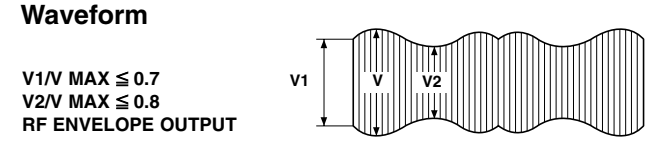


Fig. C-7

8. Check the Tape Travel after Reassembling Deck Assembly.

8-1. Check Audio and RF Locking Time during playback and after CUE or REV (FF/REW)

Test Equipment/ Fixture	Specification	Connection Points	Test Conditions (Mechanism Condition)
• Oscilloscope • Alignment tapes (with 6H 3kHz Color Bar Signal) • Stop Watch	• RF Locking Time: Less than 5 sec. • Audio Locking Time:Less than 10sec	• CH-1: PB RF Envelope • CH-2: Audio Output • RF Envelope Output Point • Audio Output Jack	• Play an alignment tape (with 6H 3kHz Color Bar Signal)

Checking Procedure

Play an alignment tape then change the operating mode to CUE or REV and confirm if the unit meets the above listed specifications.

NOTES:

1) CUE is fast forward mode (FF)
2) REV is the rewind mode (REW)
3) Referenced to the Play mode

8-2. Check for tape curling or jamming

Test Equipment/ Fixture	Specification	Test Conditions (Mechanism Condition)
• T-160 Tape • T-120 Tape	• Be sure there is no tape jamming or curling at the begining, middle or end of the tape.	• Run the CUE, REV play mode at the beginning and the end of the tape.

Checking Procedure

1) Confirm that the tape runs smoothly around the roller guides, drum and A/C head assemblies while abruptly changing operating modes from Play to CUE or REV. This is to be checked at the begining, middle and end sections of the cassette.
2) Confirm that the tape passes over the A/C head assembly as indicated by proper audio reproduction and proper tape counter performance.

1 Check before starting repairs

The following faults can be remedied by cleaning and oiling. Check the needed lubrication and the conditions of cleanliness in the unit.
Check with the customer to find out how often the unit is used, and then determine that the unit is ready for inspection and maintenance. Check the following parts.

Phenomenon	Inspection	Replacement	
Color beats	Dirt on full-erase head	o	F/E Head
Poor S/N, no color	Dirt on video head	o	Video Head
Vertical or Horizontal jitter	Dirt on video head Dirt on tape transport system	o	
Low volume, Sound distorted	Dirt on Audio/control head	o	A/C Head
Tape does not run. Tape is slack	Dirt on pinch roller	o	Pinch Roller Belt Capston
In Review and Unloading (off mode), the Tape is rolled up loosely.	Clutch Assembly D33K Torque reduced	o	Clutch Assembly D33K
	Cleaning Drum and transport system	Fig. C-9-3	

NOTE

If locations marked with **o** do not operate normally after cleaning, check for wear and replace.
See the EXPLODED VIEWS at the end of this manual as well as the above illustrations See the Greasing (Page 4-22) for the sections to be lubricated and greased.

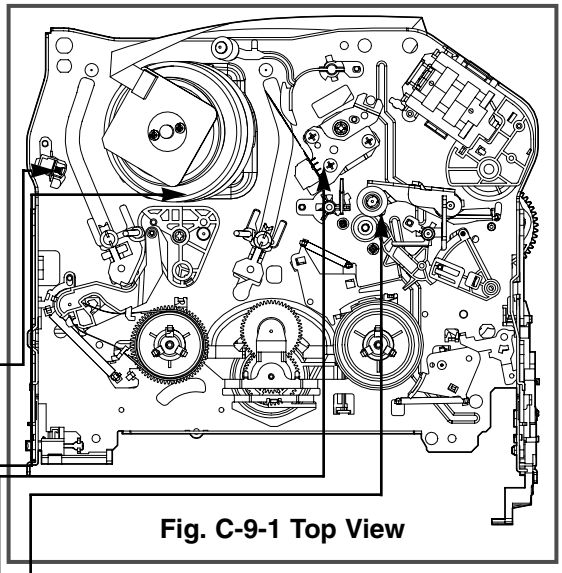


Fig. C-9-1 Top View

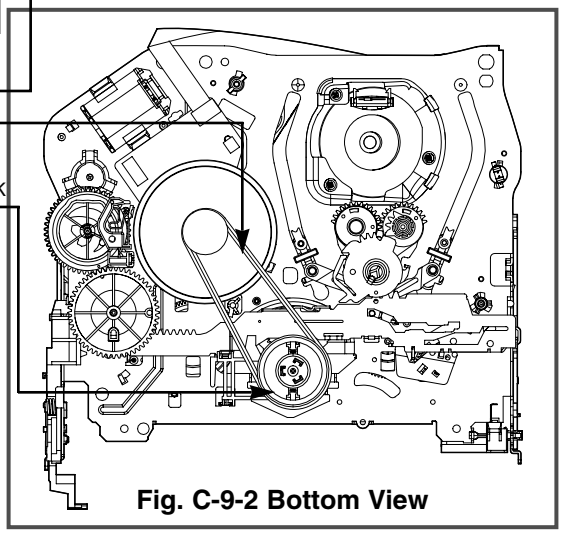


Fig. C-9-2 Bottom View

*** No. (1) ~ (13) Indicates the Tape Path to be traveled from Supply Reel to Take-up Reel.**

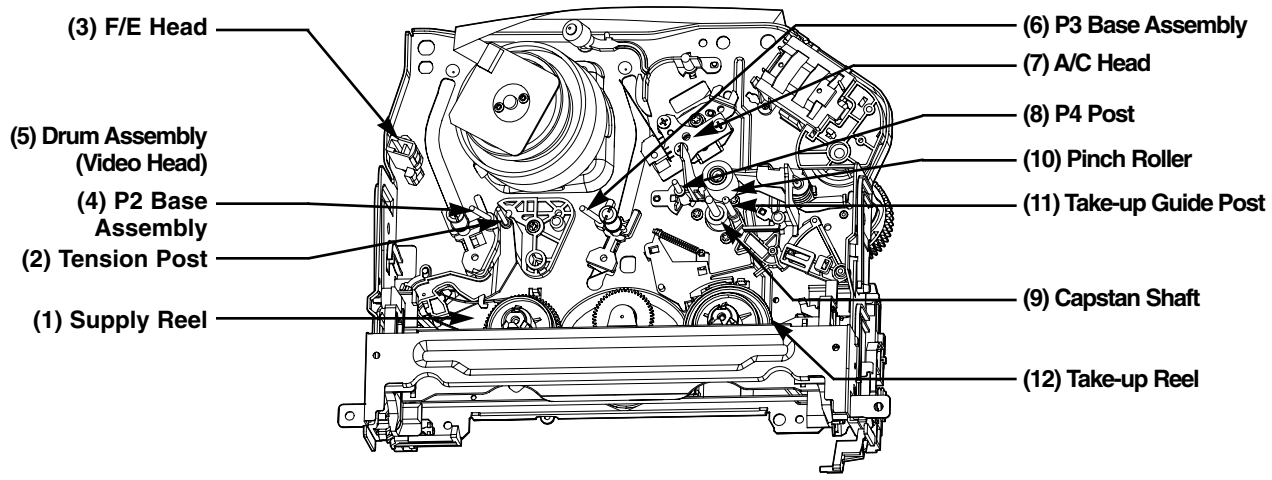


Fig. C-9-3 Tape Transport System

2. Required Maintenance

The recording density of a VCR (VCP) is much higher than that of an audio tape recorder. VCR (VCP) components must be very precise, at tolerances of 1/1000mm, to ensure compatiblity with other VCRs. If any of these components are worn or dirty, the symptoms will be the same as if the part is defective. To ensure a good picture, periodic inspection and maintenance, including replacement of worn out parts and lubrication, is necessary.

3. Scheduled Maintenance

Schedules for maintenance and inspection are not fixed because they vary greatly according to the way in which the customer uses the VCR, and the environment in which the VCR is used.
But, in general home use, a good picture will be maintained if inspection and maintenance is made every 1,000 hours. The table below shows the relation between time used and inspection period.

Table 1

When inspection is necessary / Average hours used per day	About 1 year	About 18 months	About 3 years
One hour	■	■	■
Two hours	■	■	
Three hours	■		

4. Supplies Required for Inspection and Maintence

(1) Grease: Kanto G-311G (Blue) or equivalent
(2) Isopropyl Alcohol or equivalent
(3) Cleaning Patches
(4) Grease: Kanto G-381 (Yellow)

5) Maintenance Procedure

5-1) Cleaning

(1) Cleaning video head
First use a cleaning tape. If the dirt on the head is too stubborn to remove by tape, use the cleaning patch. Coat the cleaning patch with Isopropyl Alcohol. Touch the cleaning patch to the head tip and gently turn the head (rotating cylinder) right and left.
(Do not move the cleaning patch vertically. Make sure that only the buckskin on the cleaning patch comes into contact with the head. Otherwise, the head may be damaged.)
Thoroughly dry the head. Then run the test tape. If Isopropyl Alcohol remains on the video head, the tape may be damaged when it comes into contact with the head surface.
(2) Clean the tape transport system and drive system, etc, by wiping with a cleaning patch wetted with Isporopyl Alcohol.

NOTES:

① It is the tape transport system which comes into contact with the running tape. The drive system consists of those parts which moves the tape.
② Make sure that during cleaning you do not touch the tape transport system with the tip of a screw driver and no that force is that would cause deforming or damage applied to the system.

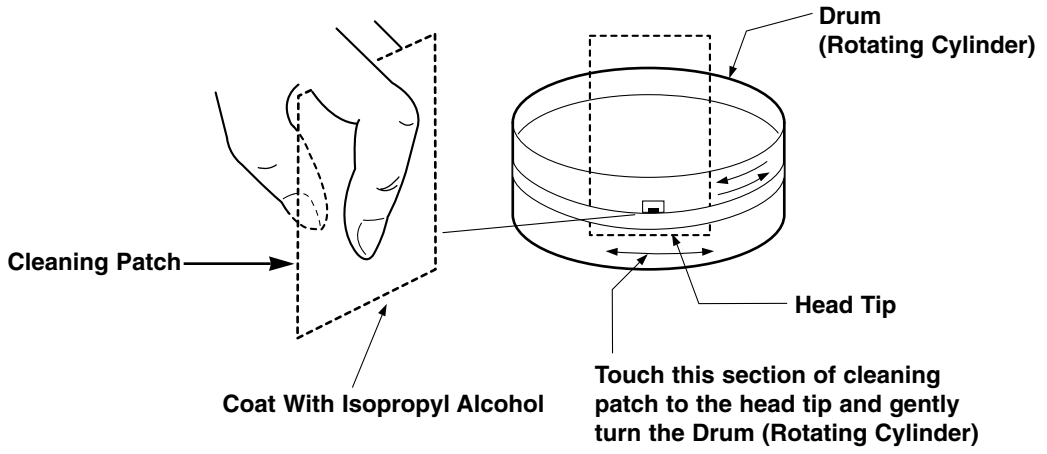

Drum
(Rotating Cylinder)
Cleaning Patch
Head Tip
Coat With Isopropyl Alcohol
Touch this section of cleaning patch to the head tip and gently turn the Drum (Rotating Cylinder)

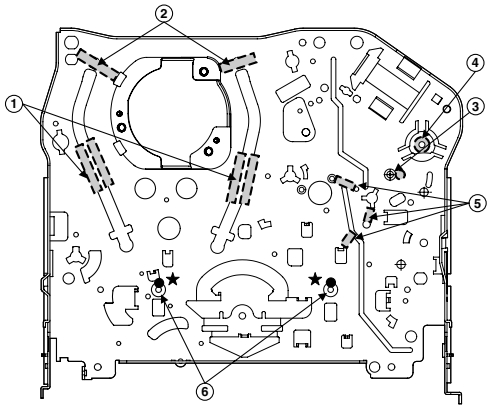
Fig. C-9-4

5-2) Greasing

(1) Greasing guidelines
Apply grease, with a cleaning patch. Do not use excess grease. It may come into contact with the tape path or drive system. If this occurs wipe off any excess and clean with cleaning patch using Isopropyl Alcohol.

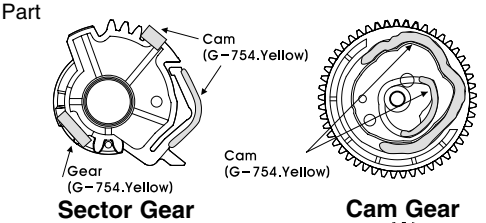
NOTE:Greasing Points

1) Loading Path Inside & Top side
2) Tension Base Boss inside Hole
3) F/L Arm Assembly "U" Groove
4) Take-up Arm Rubbing Section
5) L/D Motor Gear Wheel Part
6) Shaft
7) F/L Arm Assembly of Burning Inside Hole
8) S Reel, T Shaft (G381:Yellow)
9) Brake T Groove

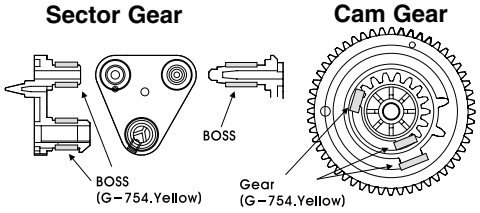


Chassis (Top)

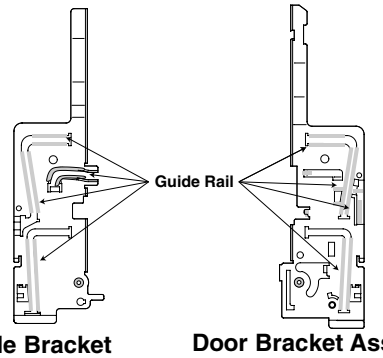
Gear Part



Sector Gear **Cam Gear**



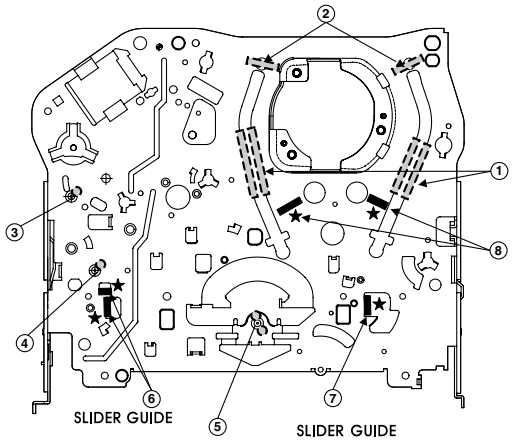
Loading Base **Drive Gear**



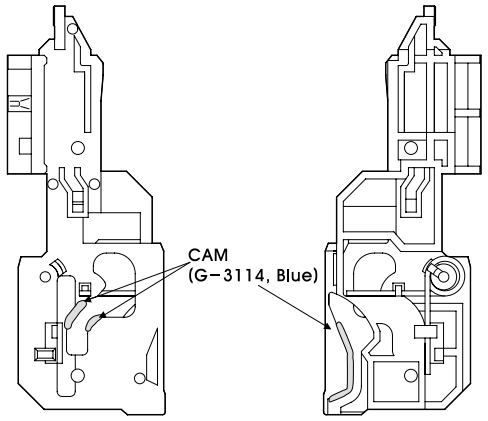
(L) Side Bracket **Door Bracket Assembly**

(2) Periodic greasing
Grease specified locations every 5,000 hours.

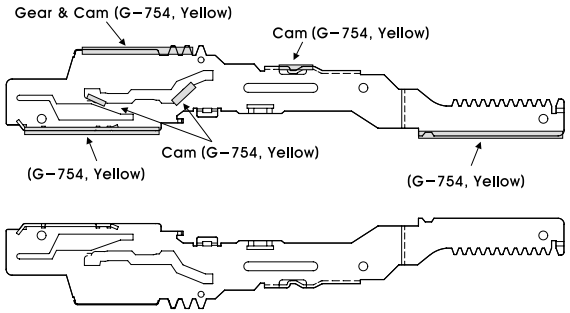
1) Loading Path Inside & Top side
2) Shaft
3) F/L Gear Rack Moving Section
4) Shaft
5) Tension Lever Groove
6) D33 Clutch Assembly Shaft
7) "S" Brake Rubbing Section



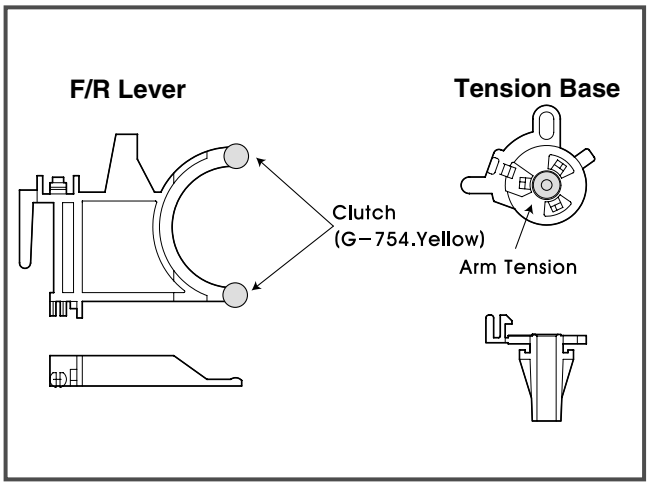
Chassis (Bottom)



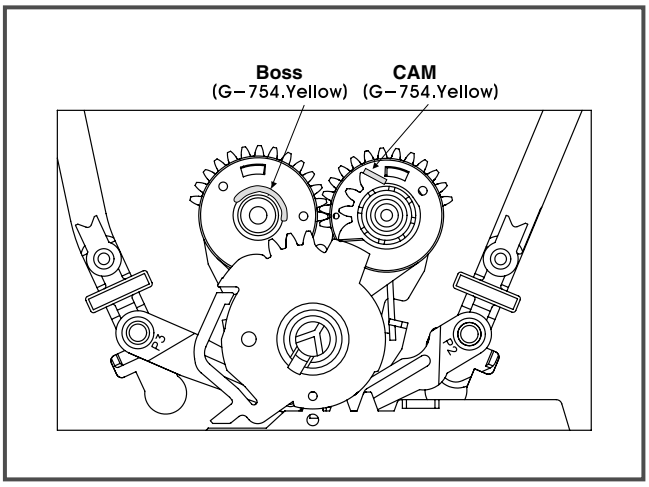
F/L Guide Rack **F/L Gear Rack**



GEAR , F/R



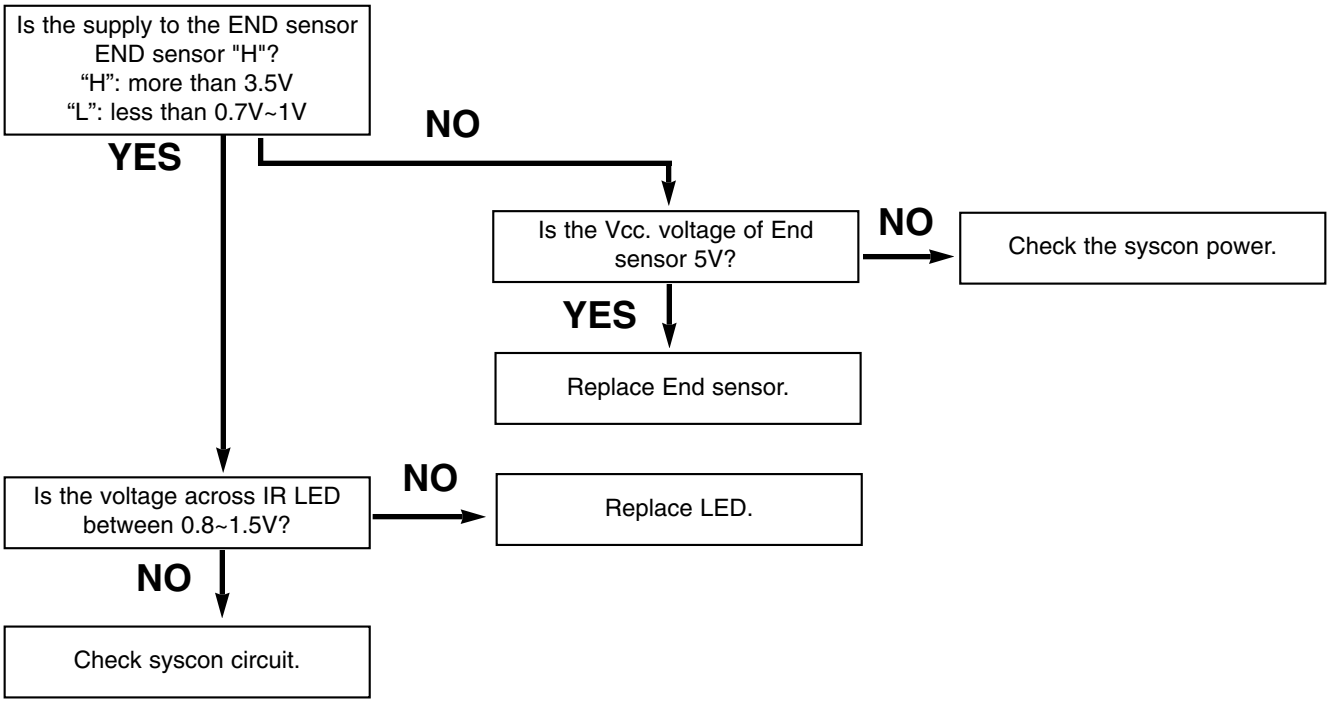
GEAR AY, P2 & P3



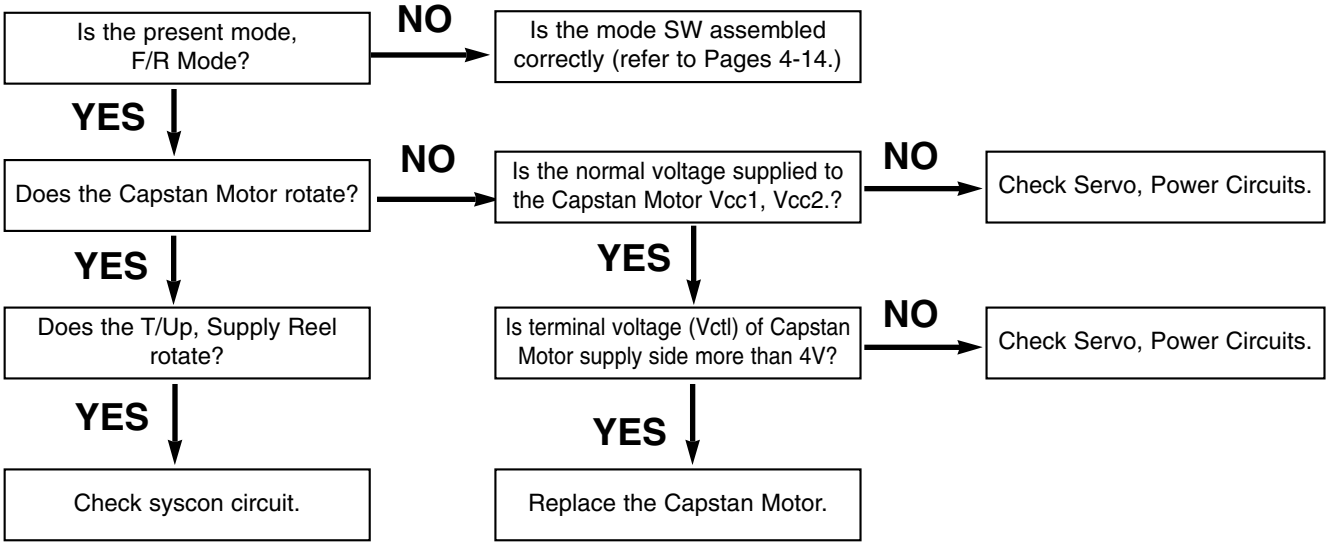
MECHANISM TROUBLESHOOTING GUIDE

1.Deck Mechanism

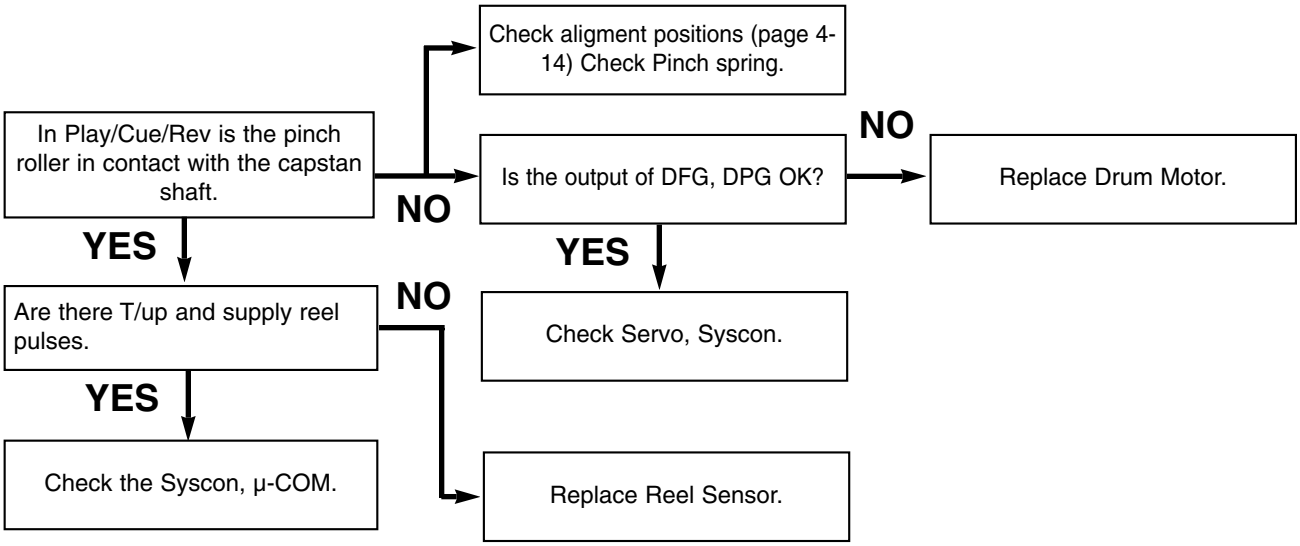
A. Auto REW doesn't work



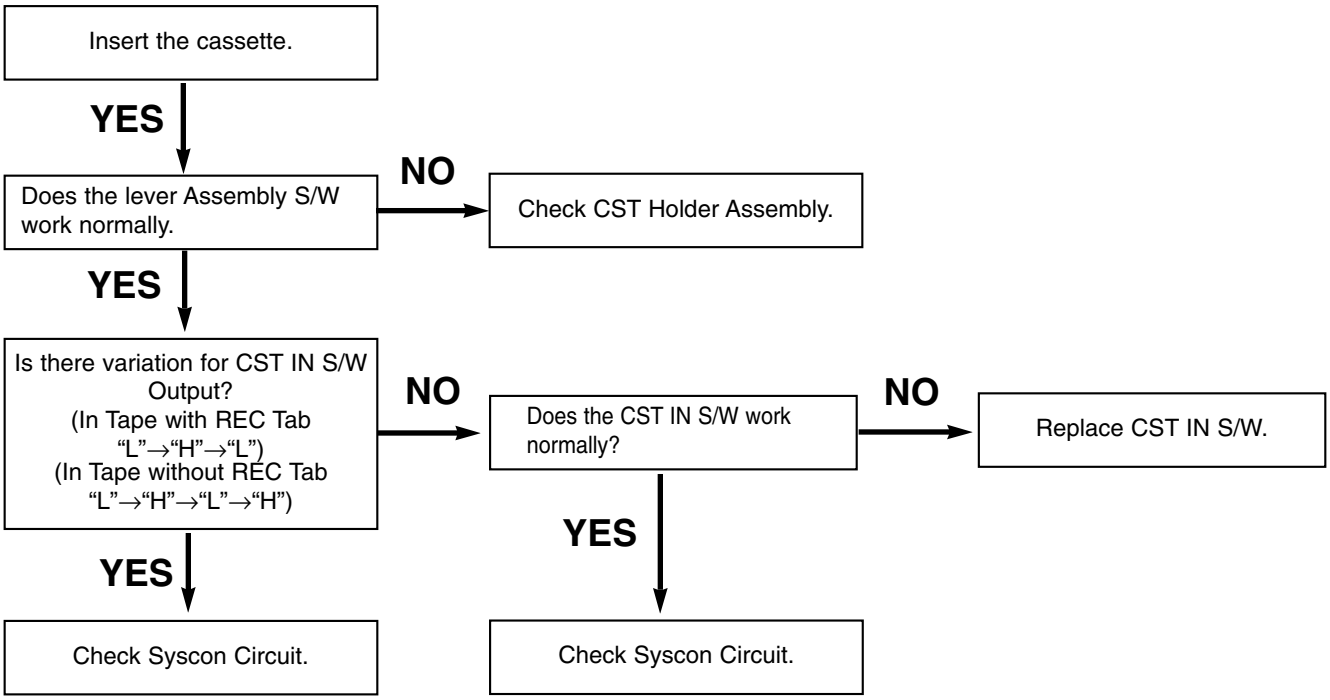
B. No F/R Mode



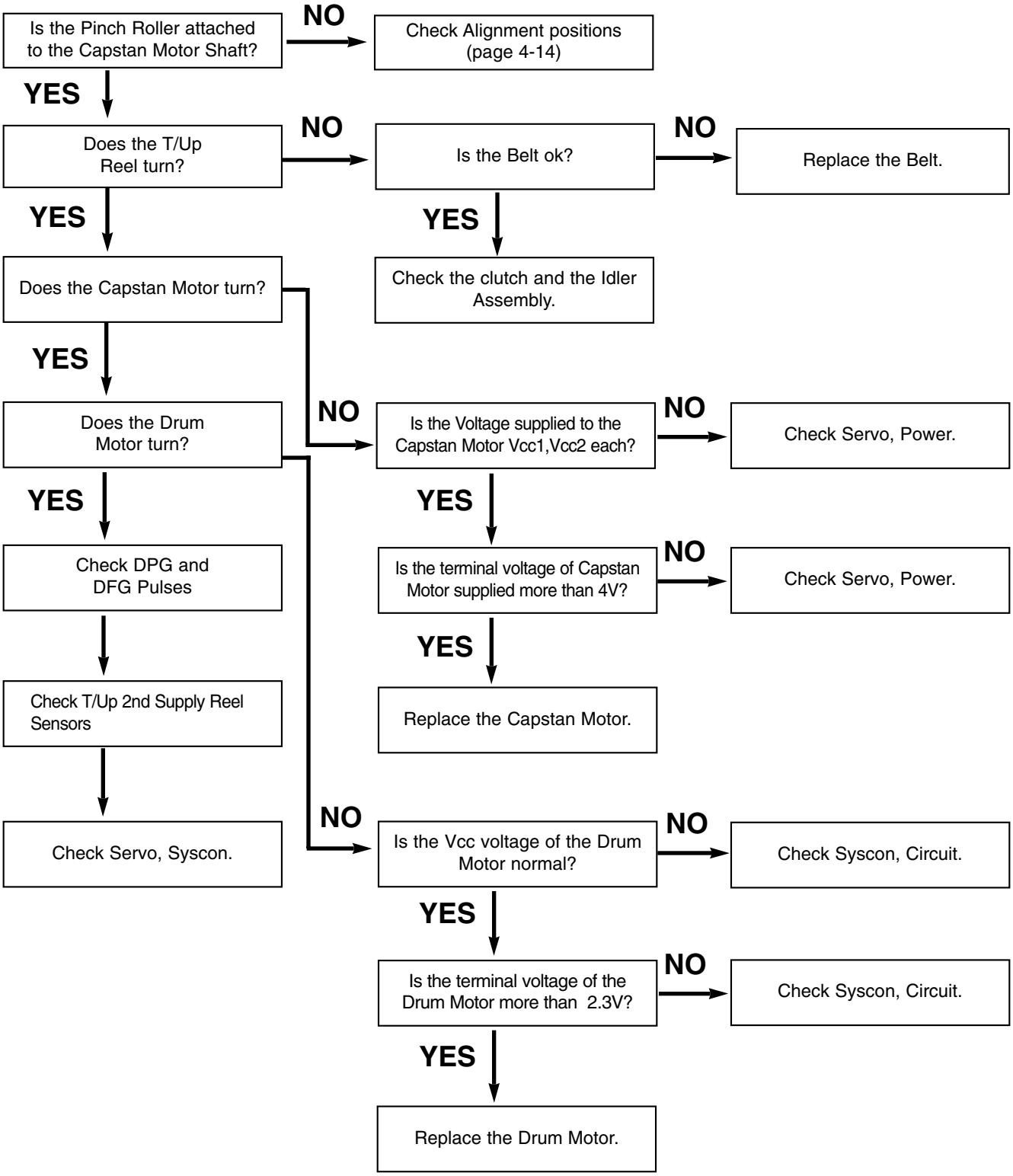
C. AUTO STOP(PLAY/CUE/REV)



D. NO CASSETTE LOADING



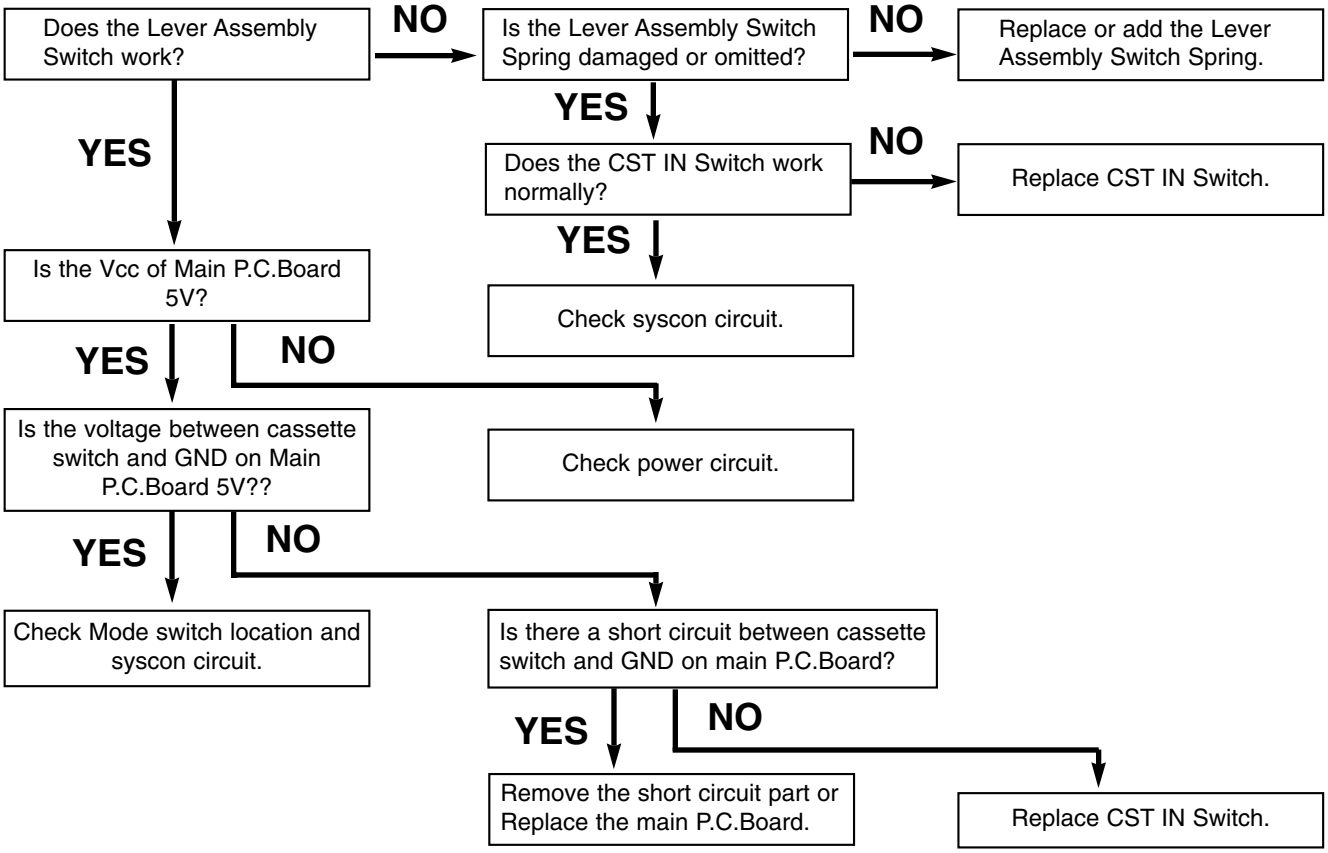
E. In PB mode Tape presence not sensed.



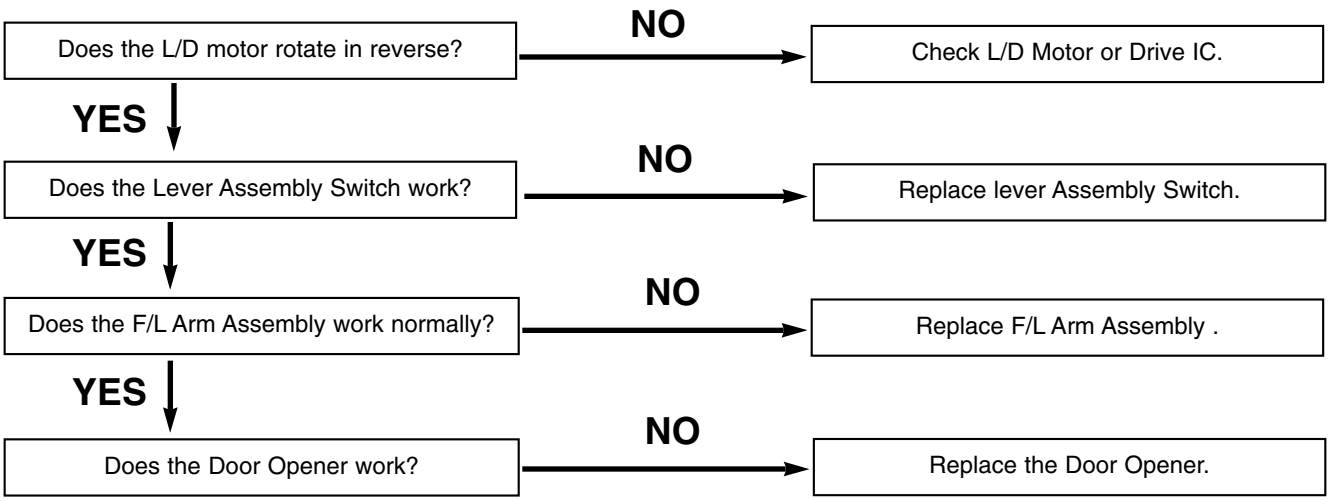
MECHANISM TROUBLESHOOTING GUIDE

2. Front Loading Mechanism

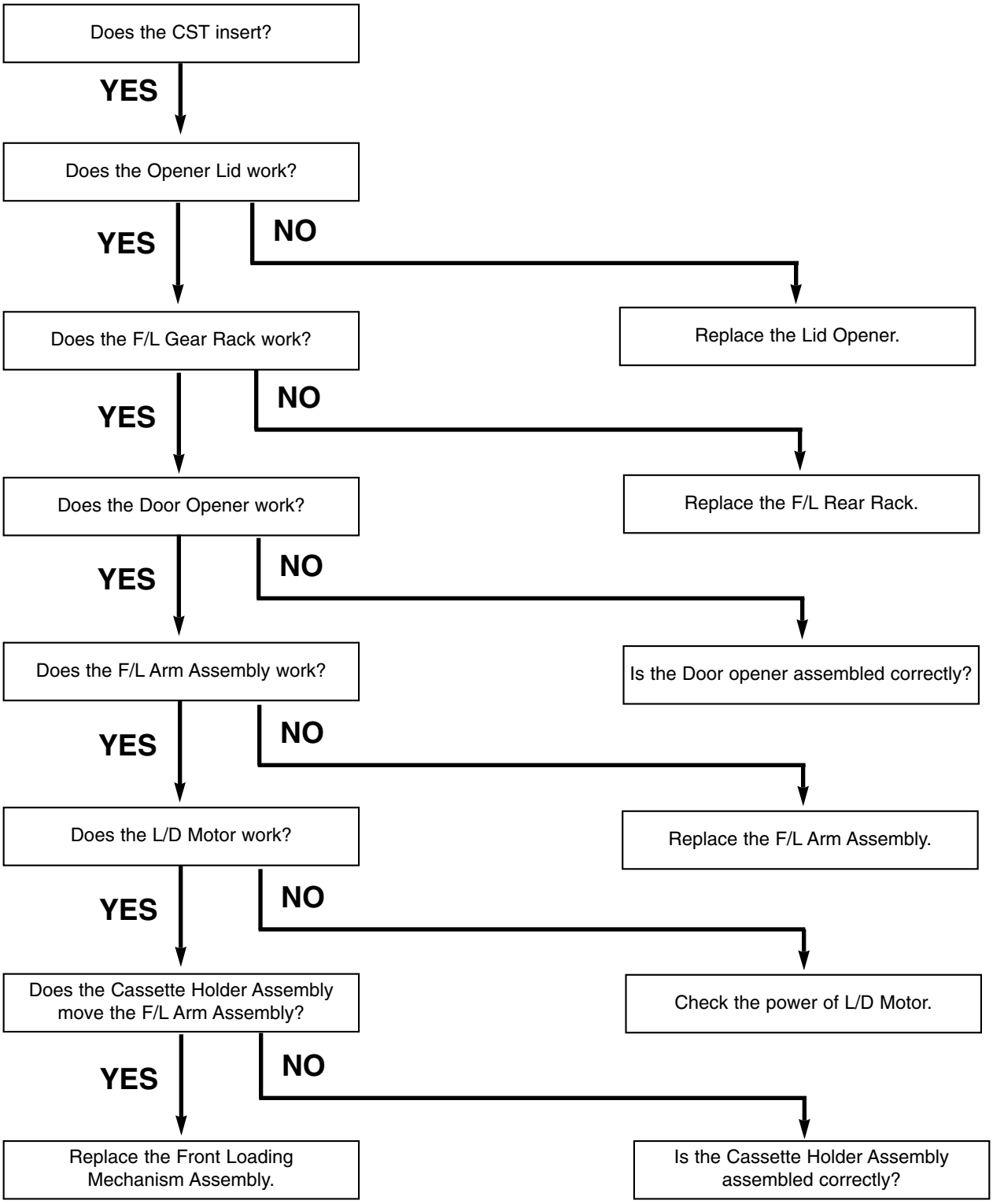
A. Cassette can not inserted


Does the Lever Assembly Switch work?
NO
Is the Lever Assembly Switch Spring damaged or omitted?
NO
Replace or add the Lever Assembly Switch Spring.
YES
YES
Does the CST IN Switch work normally?
NO
Replace CST IN Switch.
YES
Is the Vcc of Main P.C.Board 5V?
Check syscon circuit.
YES
NO
Is the voltage between cassette switch and GND on Main P.C.Board 5V??
Check power circuit.
YES
NO
Check Mode switch location and syscon circuit.
Is there a short circuit between cassette switch and GND on main P.C.Board?
YES
NO
Remove the short circuit part or Replace the main P.C.Board.
Replace CST IN Switch.

B. Cassette will not eject

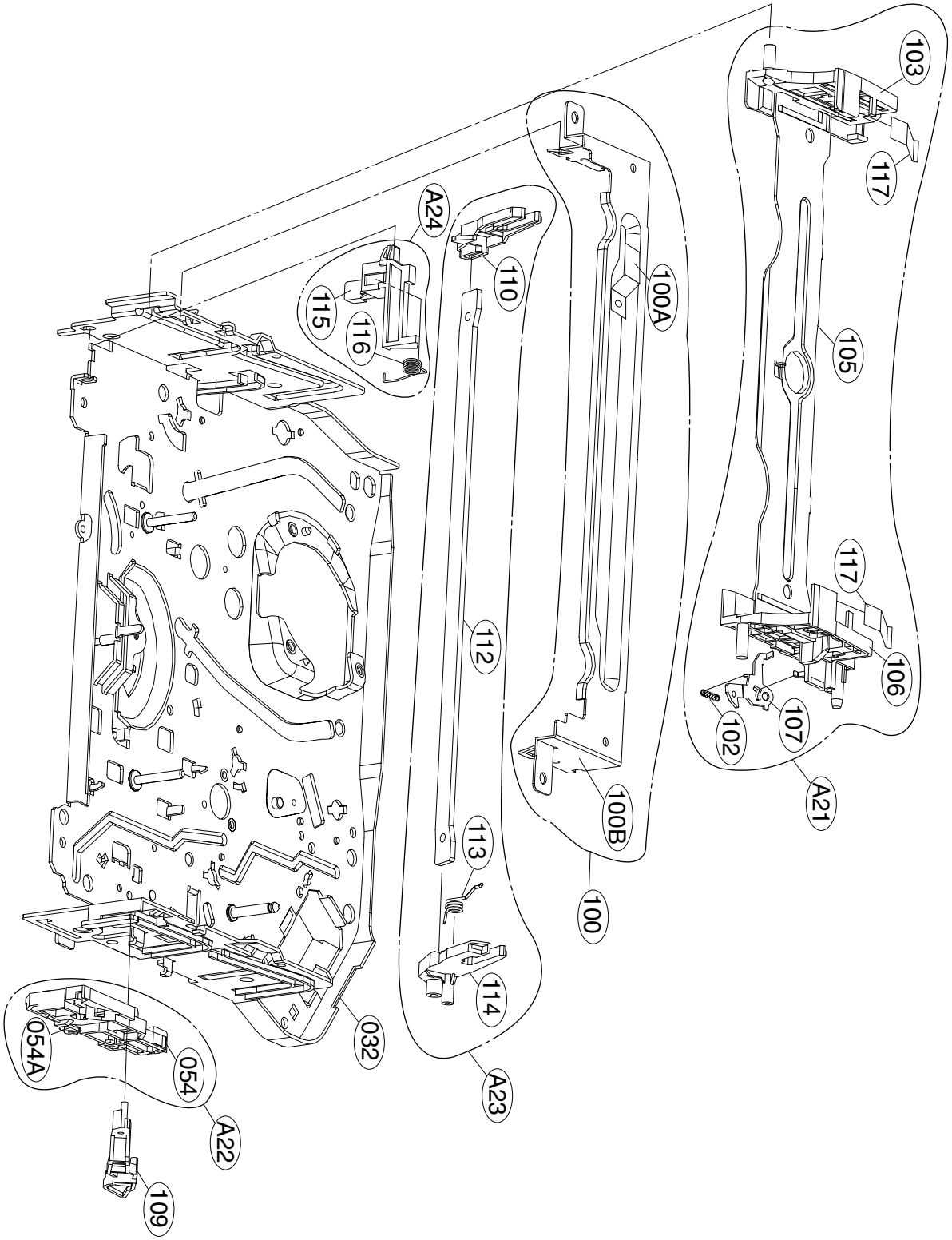


C. Cassette will not load



EXPLODED VIEWS

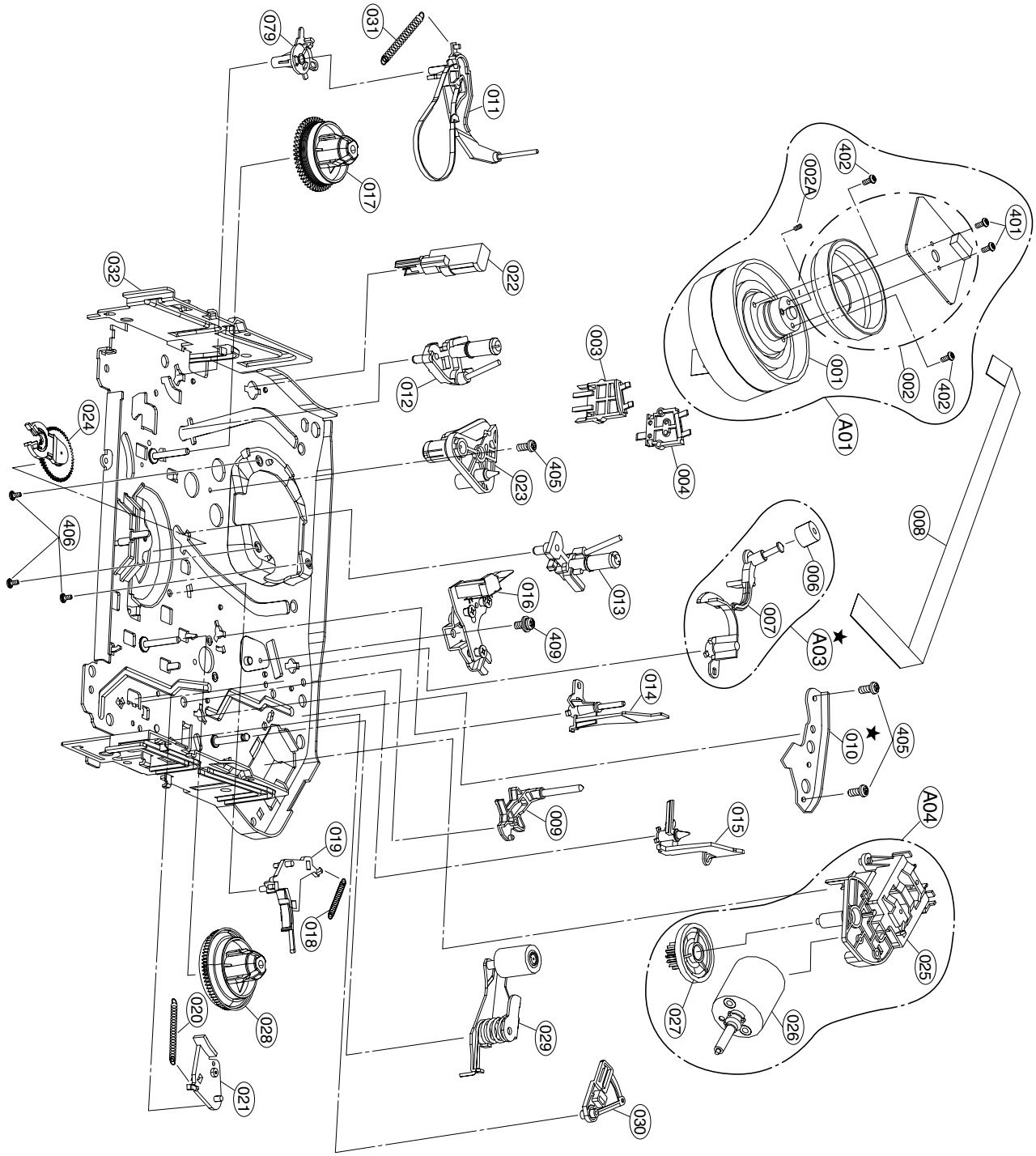
1. Front Loading Mechanism Section



EXPLODED VIEWS

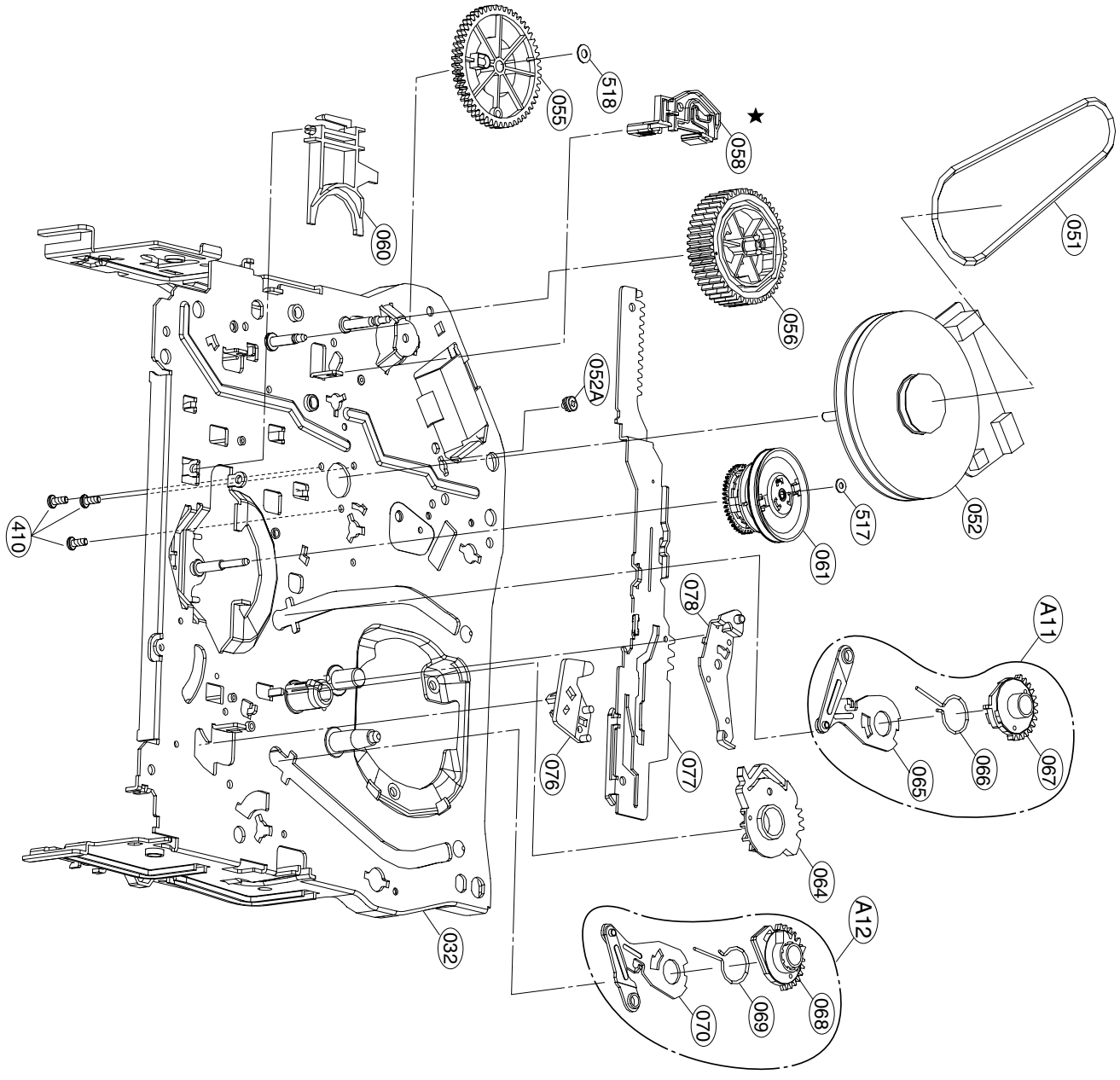
2. Moving Mechanism Section (1)

★ OPTIONAL PART



3. Moving Mechanism Section (2)

★ OPTIONAL PART



MEMO

SECTION 5 MECHANISM OF DVD PART

CONTENTS

DECK MECHANISM PARTS LOCATIONS

- **Top View.....5-1**
- **Top View(without Tray Disc) 5-1**
- **Bottom View 5-1**

DECK MECHANISM DISASSEMBLY

1. Holder Clamp.....5-2

1-1. Clamp Assembly Disc.....5-2
1-1-1. Plate Clamp 5-2
1-1-2. Magnet Clamp 5-2
1-1-3. Clamp Upper.....5-2

2. Tray Disc 5-2

3. Base Assembly Sled.....5-3

3-1. Gear Assembly Feed 5-3
3-2. Gear Assembly Middle.....5-3
3-3. Gear Assembly Rack 5-3

4. Rubber Rear.....5-3

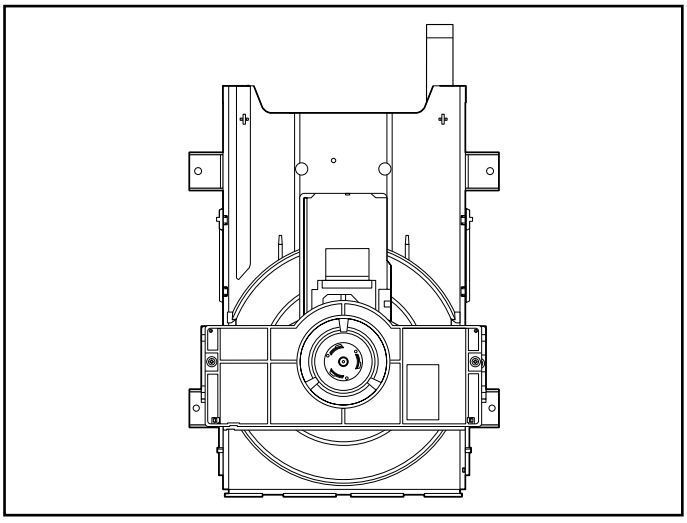
5. Frame Assembly Up/Down 5-4
6. Belt Loading.....5-4
7. Gear Pulley 5-4
8. Gear Loading 5-4
9. Guide Up/Down.....5-4
10. PWB Assembly Loading 5-4
11. Base Main.....5-4

EXPLODED VIEW

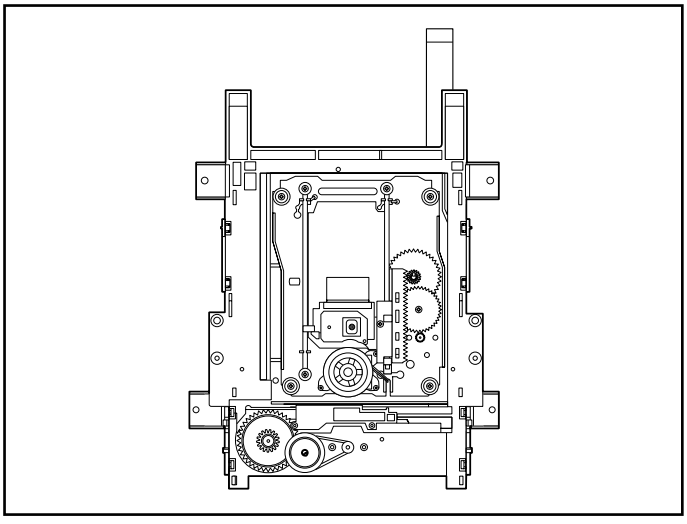
1. Deck Mechanism Exploded View....5-5

DECK MECHANISM PARTS LOCATION

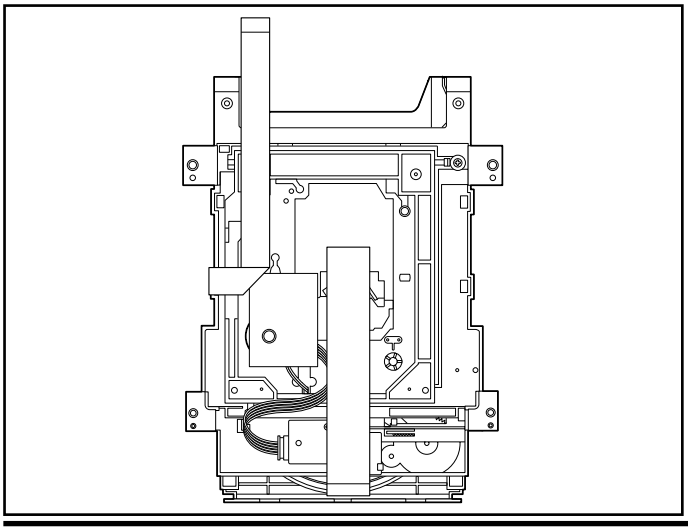
• Top View (With Tray)



• Top View (Without Tray)



• Bottom View



Procedure Starting No.		Parts	Fixing Type	Disassembly	Figure
	1	Holder Clamp	2 Screws, 2 Locking Tabs		5-1
1	2	Clamp Assembly Disc			5-1
1, 2	3	Plate Clamp			5-1
1, 2, 3	4	Magnet Clamp			5-1
1, 2, 3, 4	5	Clamp Upper			5-1
1	6	Tray Disc			5-2
1, 6	7	Base Assembly Sled	4 Screws,		5-3
1, 2, 6	8	Gear Assembly Feed			5-3
1, 2, 6, 8	9	Gear Middle			5-3
1, 2, 6, 8, 9	10	Gear Assembly Rack	1 Screw		5-3
1, 2, 7	11 12	Rubber Rear			5-3
1, 2, 7	13	Frame Assembly Up/Down	1 Screw	Bottom	5-4
1, 2	14	Belt Loading	1 Locking Tab		5-4
1, 2 ,13	15	Gear Pulley			5-4
1, 2, 13, 14	16	Gear Loading	1 Locking Tab		5-4
1, 2, 7, 12, 13, 14	17	Guide Up/Down			5-4
1, 2, 13	18	PWB Assembly Loading	1 Locking Tab 1 Hook 2Screw	Bottom	5-4
1, 2, 7, 12, 13, 14, 15, 16, 17		Base Main			5-4

Note

When reassembling, perform the procedure in reverse order.

The “Bottom” on Disassembly column of above Table indicates the part should be disassembled at the Bottom side.

DECK MECHANISM DISASSEMBLY

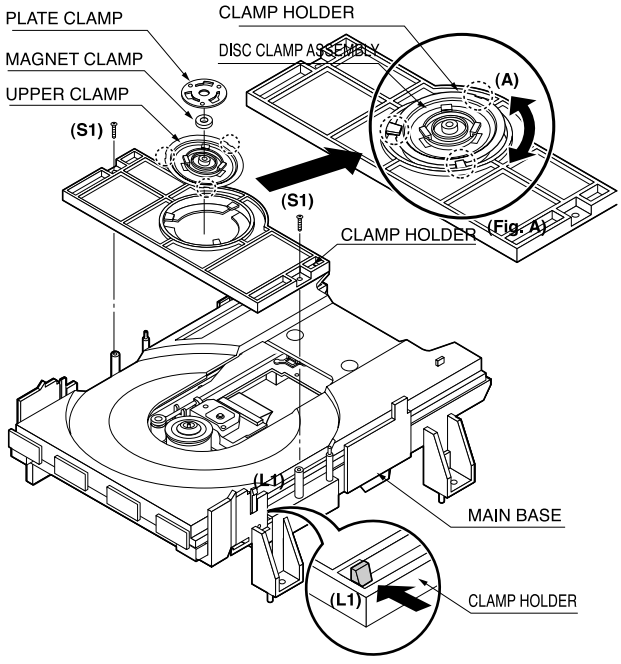


Fig. 5-1

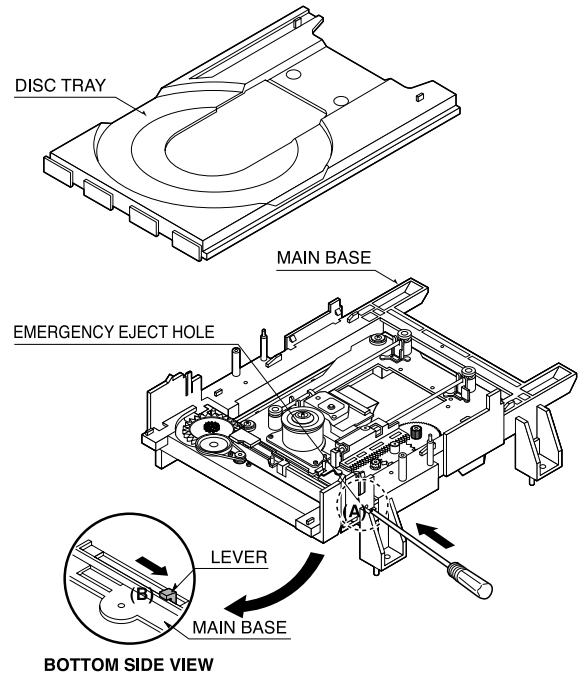


Fig. 5-2

1. Holder Clamp (Fig. 5-1)

1) Release 2 Screws(S1).
2) Unhook 2 Locking Tabs(L1).
3) Lift up the Holder Clamp and then separate it from the Base Main.

1-1. Clamp Assembly Disc

1) Place the Clamp Assembly Disc as Fig. (A)
2) Lift up the Clamp Assembly Disc in direction of arrow(A).
3) Separate the Clamp Assembly Disc from the Holder Clamp.

1-1-1. Plate Clamp

1) Turn the Plate Clamp to counterclockwise direction and then lift up the Plate Clamp.

1-1-2. Magnet Clamp

1-1-3. Clamp Upper

2. Tray Disc (Fig. 5-2)

1) Insert and push a Driver in the emergency eject hole(A) at the right side, or put the Driver on the Lever(B) of the Gear Emergency and pull the Lever(B) in direction of arrow so that the Tray Disc is ejected about 15~20mm.
2) Pull the Tray Disc until it is separated from the Base Main completely.

DECK MECHANISM DISASSEMBLY

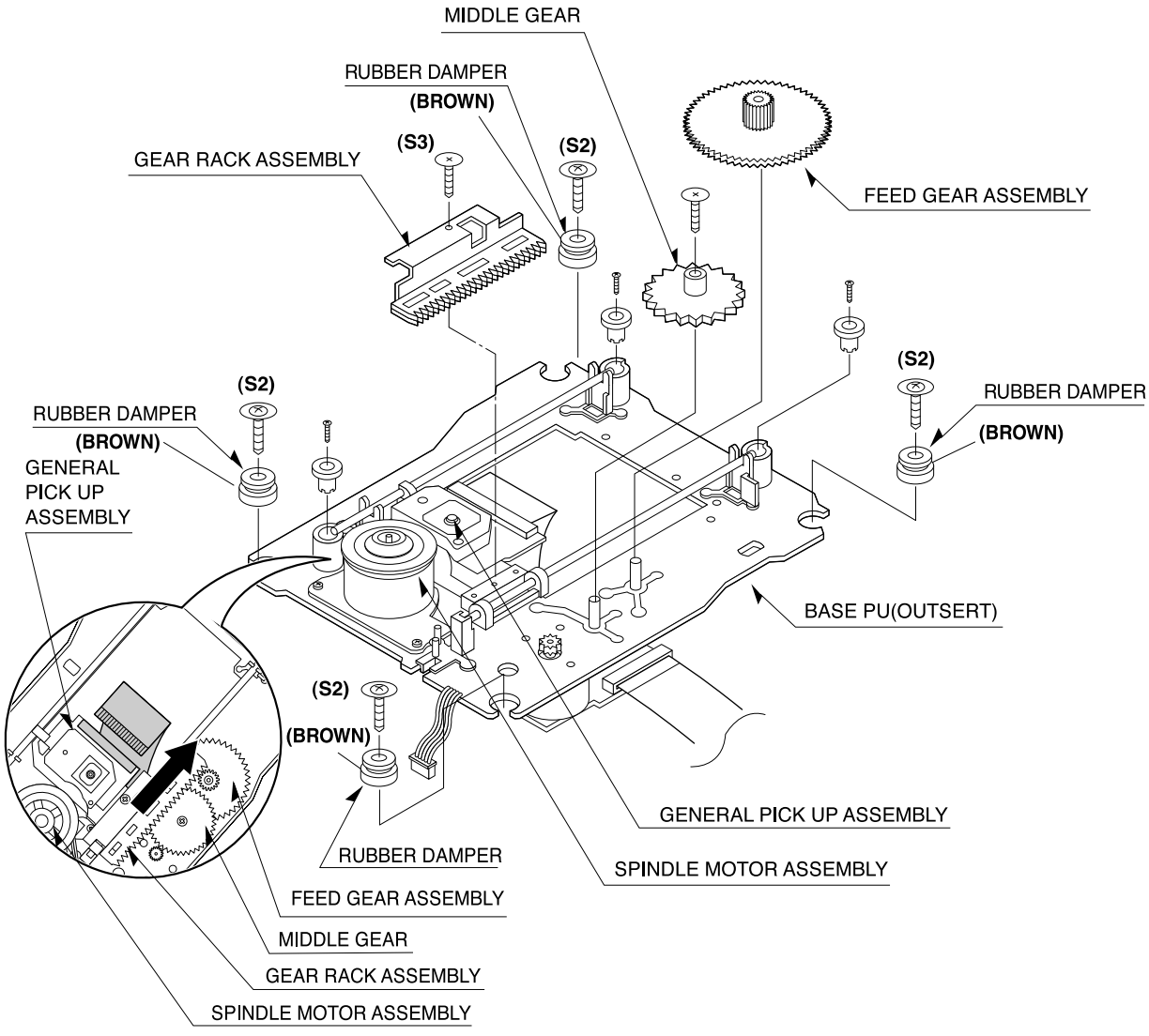


Fig. 5-3

3. Base Assembly Sled (Fig. 5-3)

1) Release 4 Screw(S2).
2) Disconnect the FFC Connector(C1)

3-1. Gear Assembly Feed

3-2. Gear Middle

3-3. Gear Assembly Rack

1) Release the Scerw(S3)

4. Rubber Rear (Fig. 5-3)

DECK MECHANISM DISASSEMBLY

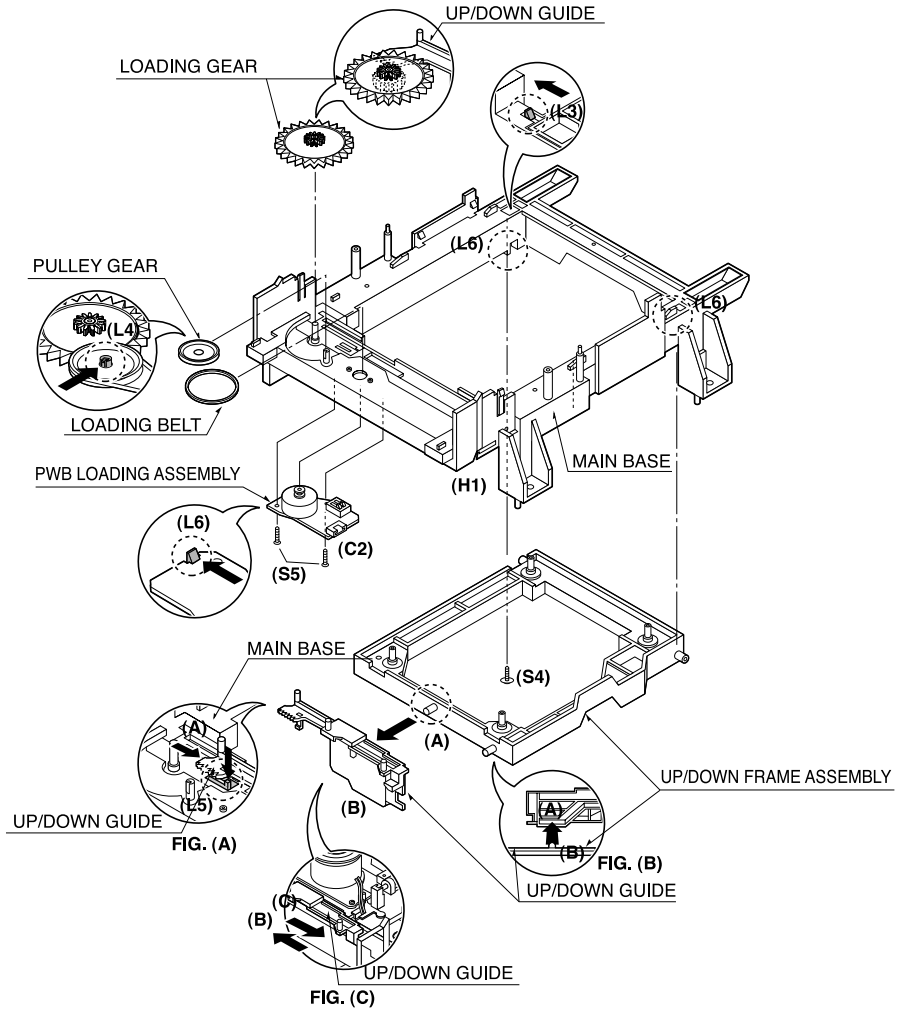


Fig. 5-4

5. Frame Assembly Up/Down (Fig. 5-4)

Note

Put the Base Main face down(Bottom Side)

1) Release the Screw(S4)
2) Unlock the Locking Tab(L3) in direction of arrow and then lift up the Frame Assembly Up/Down to separate it from the Base Main.

Note

- When reassembling move the Guide Up/Down in direction of arrow(C) until it is positioned as Fig.(C).
- When reassembling insert (A) portion of the Frame Assembly Up/Down in the (B) portion of the Guide Up/Down as Fig.(B)

6. Belt Loading(Fig. 5-4)

Note

Put the Base Main on original position(Top Side)

7. Gear pulley (Fig. 5-4)

1) Unlock the Locking Tab(L4) in direction of arrow(B) and then separate the Gear Pulley from the Base Main.

8. Gear Loading (Fig. 5-4)

9. Guide Up/Down (Fig. 5-4)

1) Move the Guide Up/Down in direction of arrow(A) as Fig.(A)
2) Push the Locking Tab(L5) down and then lift up the Guide Up/Down to separate it from the Base Main.

Note

When reassembling place the Guide Up/Down as Fig.(C) and move it in direction arrow(B) until it is locked by the Locking Tab(L5). And confirm the Guide Up/Down as Fig.(A)

10. PWB Assembly Loading (Fig. 5-4)

Note

Put the Base Main face down(Bottom Side)

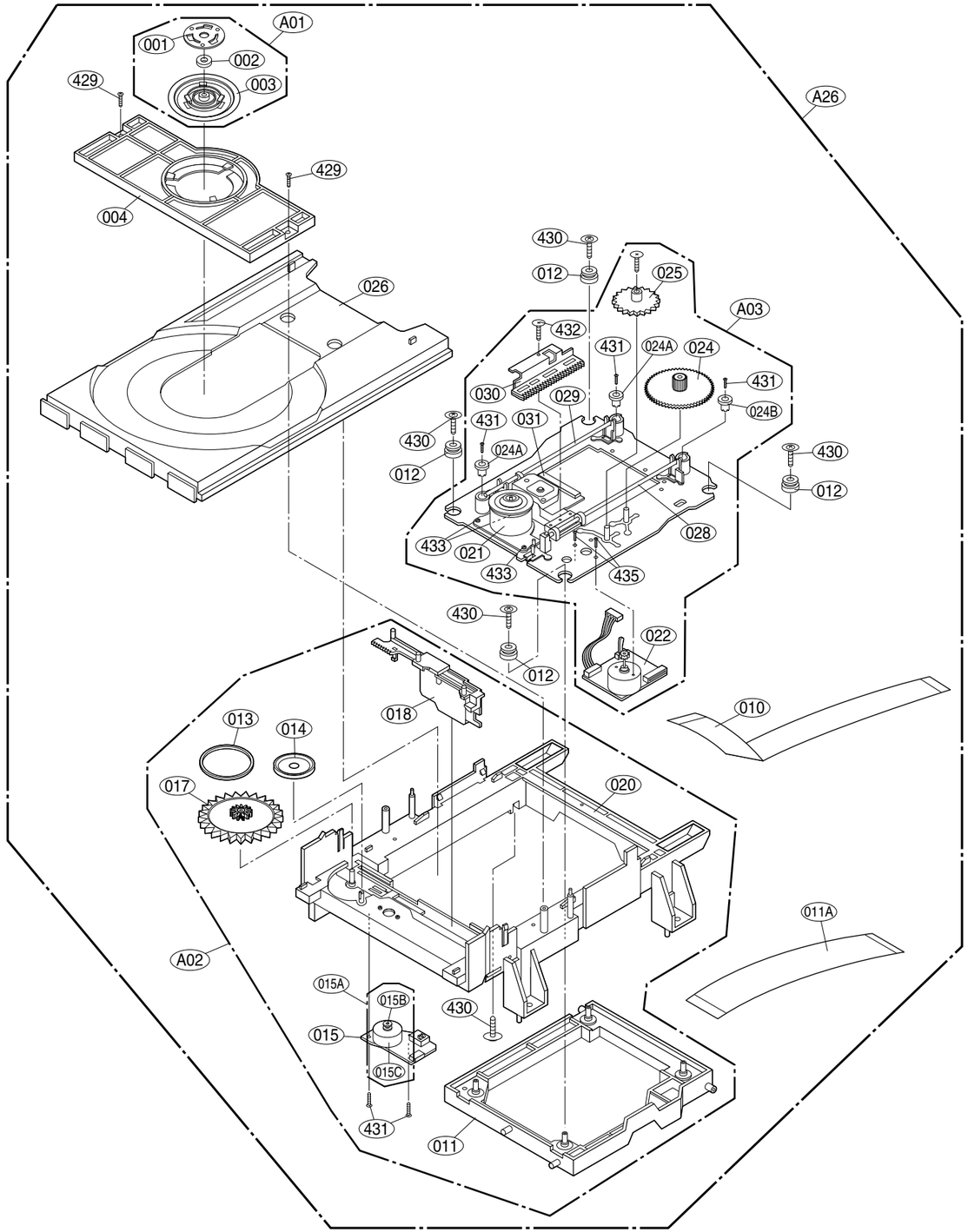
1) Release 2 Screws(S5)
2) Unlock the Loading Motor (C2) from the Hook (H1) on the Base Main.
3) Unlock 2 Locking Tabs(L6) and separate the PWB Assembly Loading from the Base Main.

11. Base Main(Fig. 5-4)

MEMO

EXPLODED VIEWS

1. Deck Mechanism Exploded View



MEMO

MEMO

NOTES) If you want to purchase Flash memory, you must order "IC5A1A"

NOTES) ⚠ Warning
Parts that are shaded are critical With respect to risk of fire or electricial shock.

SECTION 6 REPLACEMENT PARTS LIST

MODEL : XBV323(VC641MK) HA1UZZ(ZENITH) **NSP : Not avallable as service parts.**

RUN DATE :04-JULY-03

S	AL	LOCA. NO.	LG PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		*** INDIVIDUAL PARTS ***				
		250	3110R-V004F	CASE	VC672PK NA3GOSB PRESS LV081(B	
		260	3210R-V002A	FRAME	COMBI-2 MOLD 403AF-BK	NSP
		276	4930R-0298B	HOLDER	VCR - TIMER PWB(D+V-RIB CUTTIN	
		285	3581R-T083E	DOOR ASSEMBLY	VCR VC641MK HA1UZZ B.K T33-295	
⚠		300	6410RAHX02A	POWER CORD	SP-120P/JL001 CHAUS/JULIAN UL/	
		330	3140R-V001A	CHASSIS	COMBI-2 PRESS RCA TYPE	
		452	353-051A	SCREW	SPECIAL	
		457	353-051E	SCREW	SPECIAL (3X12)	
		462	353-051G	SCREW,DRAWING	+2 D3.0 L8.0 MSWR3/FN TB ROUN	
		*** PACKING ACCESSORY ***				
		801	3835RM0060Z	INSTRUCTION ASSEMBLY	VCR VC641MK.HA1UZZ ZENITH DVD+	
		802	3890R-H543L	BOX	VC641MK HA1UZZ SWM3-A 1.297 4	
		803	3920R-E080A	PACKING,CASING	VC6000_S 0.02 150 EPS 4 1 1	
		804	292-053D	BAG	LVP-1	NSP
		806	6850R-CAA81	CABLE,COAXIAL	RF CABLE NTSC PLUG ALL STILL H	
		808	841-0021	BATTERY,MN	ER03X HI WATT 1.5V .MA/H AAA	
		811	6611R1D003A	PLUG ASSEMBLY	1WAY RC1-18RRBS1-0 FREE OF CD	
		812	6611R2D003A	PLUG ASSEMBLY	2WAY RC2-18RRBS1-0 FREE OF CD_	
		*** REMOTE CONTROLLER ***				
		900	6711R1P065G	REMOTE CONTROLLER ASSEMBLY	N6 VC681M AA1UZA NO BRAND	
		*** PANEL ASSEMBLY , FRONT ***				
		A43	3721R-F365H	PANEL ASSEMBLY,FRONT	VCR VC641MK AA1UZZ ZENITH B.K	
		280	3720R-F731G	PANEL,VIDEO	VCR VC641MK HA1UZZ MOLD B.K T3	NSP
		283	3580R-V074Q	DOOR,CASE	VCR V027 VC641MK HA1UZZ MOLD B	
		284	442-681A	SPRING	DOOR	
		*** DECK ASSEMBLY , VIDEO (DVD MD) ***				
		A26	6721RH0377A	DECK ASSEMBLY,VIDEO	DECK/MECHA DP-7C (SH)	NSP
		A01	4861R-0016B	CLAMP ASSEMBLY	DISC DP7 - SH	
		A02	3041R-M013B	BASE ASSEMBLY	MAIN DP-7C(SH)	
		A03	3041R-M022B	BASE ASSEMBLY	SLED DP-7C (SH) CNTR AY 80	
		001	3300R-0547A	PLATE	CLAMP	NSP
		002	5016H-1016B	MAGNET	CLAMP(LDM-R608,10*5,1*1.5T)	NSP
		003	4860R-0021A	CLAMP	UPPER DP7	NSP
		004	4930R-0171A	HOLDER	CLAMP	
		010	6850R-GK22Z	CABLE,FLAT	P=1.0 FFC UL2896(0.05X0.65) 11	
		011	3210R-M002A	FRAME	UP/DOWN MOLD DP7C	
		011A	6850R-JW14E	CABLE,FLAT	P=1.0 FFC UL2896(0.035X0.7) 23	
		012	5040R-0075B	RUBBER	DAMPER DP7 (CHUNG PUNG 30)	
		012	5040R-0075D	RUBBER	DAMPER DP7 (YAMAUCHI 30)	
		013	4400R-0006B	BELT	DECK/MECHA DP2-5, DP7C,DP7A OT	
		014	4470R-0055A	GEAR	PULLEY	
		015	6871R-4415D	PWB(PCB) ASSEMBLY,TOTAL	LOADING DP4 MITSUMI -SH	
		017	4470R-0056A	GEAR	LOADING	
		018	4974R-0023A	GUIDE	UP/DOWN	
		020	3040R-M001A	BASE	MAIN MOLD	
		021	4680R-C011A	MOTOR(MECH)	SPINDLE JCL9B68 SANKYO FOR COM	

S	AL	LOCA. NO.	LG PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		022	4681R-0038B	MOTOR ASSEMBLY	DECK/MECHA FEED DP-7C (SH) CNT	
		024	4470R-0131A	GEAR	PINION DP7C	
		024B	5006R-0043A	CAP	SKEW DP7C	
		025	4470R-0130A	GEAR	MIDDLE DP7C	
		026	3390R-0014A	TRAY	DISK	
		028	4370R-0082B	SHAFT	DECK/MECHA PU R DP-7C OTHER	
		029	4370R-0082A	SHAFT	PU DP-7C	
		030	4471R-0013B	GEAR ASSEMBLY	DECK/MECHA RACK DP-7C (SH)	
		031	6716DPH005A	PICK UP,DVD	PVR-502W MITSUMI PLAYER H/HIGH	
		024A	5006R-0044A	CAP	SKEW-T DP7C	
		429	1SZZR-0012A	SCREW,	B-TITE	
		430	1SZZH-1003A	SCREW,	+ D2.0 6MM SWRCH16A/NIY 4.5MM	
		430	1SZZH-1003A	SCREW,	+ D2.0 6MM SWRCH16A/NIY 4.5MM	
		431	1SZZH-1007B	SCREW,DRAWING	+ D2.0 6MM SWRCH16A/ZNBK 4MM 1	
		431	1SZZH-1007B	SCREW,DRAWING	+ D2.0 6MM SWRCH16A/ZNBK 4MM 1	
		433	1SZZR-0050A	SCREW,DRAWING	+ 1 D2.0 L4.5 SWRCH16A/ZNY S-T	
		435	1SZZR-0011A	SCREW,	MACHINE	
		***	**BOARD ASSEMBLY MAIN(VCR)**	***		
		A46	3501R-8430J	BOARD ASSEMBLY	VCR VC641MK HA1UZZ	
		323	3111R-0089B	CASE ASSY	PRE-AMP (PBSB-SH)	
		C301	0CQ2232L559	CAPACITOR,POLYESTER	0.022UF S 63V K PP NI TP5	
		C302	0CE4765K618	CAPACITOR,AL.ELECTROLYTIC	47UF SR,SV 50V M FL TP 5	
		C303	0CH1223K516	CAPA,CHIP CERAMIC M/L H.D F/S	0.022U 50V K B 2.0X1.2 R/TP	
		C304	0CH1103K516	CHIP CAPA CERAMIC M/L H.D F/S	0.01U 50V K B 2.0X1.25 R/TP	
		C305	0CH1104K946	CAPACITOR,FIXED CERAMIC(TEMP.C	0.1UF 2012 50V 80%,-20% Y5V(F)	
		C306	0CH1104K946	CAPACITOR,FIXED CERAMIC(TEMP.C	0.1UF 2012 50V 80%,-20% Y5V(F)	
		C308	0CE4764F638	CAPACITOR,ELECTROLYTIC	47M SRA/SS 16V M FM5 TP(5)	
		C310	0CE2264F638	CAPACITOR,ELECTROLYTIC	22M SRA 16V M FM5 TP(5)	
		C311	0CE1054K638	CAPACITOR,ELECTROLYTIC	1.0M SRA/SS50V M FM5 TP(5)	
		C312	0CE3364F638	CAPACITOR,ELECTROLYTIC	33M SRA 16V M FM5 TP(5)	
		C313	0CH1104K946	CAPACITOR,FIXED CERAMIC(TEMP.C	0.1UF 2012 50V 80%,-20% Y5V(F)	
		C314	0CH1103K516	CHIP CAPA CERAMIC M/L H.D F/S	0.01U 50V K B 2.0X1.25 R/TP	
		C315	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C316	0CH1272K516	CHIP CAPA CERAMIC M/L H.D F/S	2700P 50V K B 2.0X1.2 R/TP	
		C317	0CH1821K516	CAPACITOR,FIXED CERAMIC(Temp.c	820PF 50V 10% B(5YP) 2012 R/TP	
		C318	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC	4.7UF SRA,SS 50V 20% FM5 TP 5	
		C319	0CE1054K638	CAPACITOR,ELECTROLYTIC	1.0M SRA/SS50V M FM5 TP(5)	
		C320	0CH4391K416	CAPACITOR,CHIP[CERAMIC M/L TC	390PF 50V J NP0 2012 R/TP	
		C321	0CH1104K946	CAPACITOR,FIXED CERAMIC(TEMP.C	0.1UF 2012 50V 80%,-20% Y5V(F)	
		C322	0CH4101K416	CAPA,CHIP CERAMIC M/L T.C F/S	100P 50V J NP0 2.0*1.25 R/TP	
		C323	0CH4101K416	CAPA,CHIP CERAMIC M/L T.C F/S	100P 50V J NP0 2.0*1.25 R/TP	
		C324	0CE1054K638	CAPACITOR,ELECTROLYTIC	1.0M SRA/SS50V M FM5 TP(5)	
		C325	0CE4764F638	CAPACITOR,ELECTROLYTIC	47M SRA/SS 16V M FM5 TP(5)	
		C327	0CE2264F638	CAPACITOR,ELECTROLYTIC	22M SRA 16V M FM5 TP(5)	
		C328	0CE1054K638	CAPACITOR,ELECTROLYTIC	1.0M SRA/SS50V M FM5 TP(5)	
		C329	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C330	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C331	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C332	0CE1054K638	CAPACITOR,ELECTROLYTIC	1.0M SRA/SS50V M FM5 TP(5)	
		C333	0CE1054K638	CAPACITOR,ELECTROLYTIC	1.0M SRA/SS50V M FM5 TP(5)	
		C334	0CE1054K638	CAPACITOR,ELECTROLYTIC	1.0M SRA/SS50V M FM5 TP(5)	
		C335	0CE1054K638	CAPACITOR,ELECTROLYTIC	1.0M SRA/SS50V M FM5 TP(5)	
		C336	0CH1103K516	CHIP CAPA CERAMIC M/L H.D F/S	0.01U 50V K B 2.0X1.25 R/TP	
		C337	0CH1103K516	CHIP CAPA CERAMIC M/L H.D F/S	0.01U 50V K B 2.0X1.25 R/TP	
		C338	0CH1104K946	CAPACITOR,FIXED CERAMIC(TEMP.C	0.1UF 2012 50V 80%,-20% Y5V(F)	
		C339	0CE4764F638	CAPACITOR,ELECTROLYTIC	47M SRA/SS 16V M FM5 TP(5)	
		C340	0CE1054K638	CAPACITOR,ELECTROLYTIC	1.0M SRA/SS50V M FM5 TP(5)	
		C341	0CH1103K516	CHIP CAPA CERAMIC M/L H.D F/S	0.01U 50V K B 2.0X1.25 R/TP	

S	AL	LOCA. NO.	LG PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		C342	0CE1054K638	CAPACITOR,ELECTROLYTIC	1.0M SRA/SS50V M FM5 TP(5)	
		C343	0CH1223K516	CAPA,CHIP CERAMIC M/L H.D F/S	0.022U 50V K B 2.0X1.2 R/TP	
		C344	0CE1054K638	CAPACITOR,ELECTROLYTIC	1.0M SRA/SS50V M FM5 TP(5)	
		C346	0CE4764F638	CAPACITOR,ELECTROLYTIC	47M SRA/SS 16V M FM5 TP(5)	
		C347	0CH1473K516	CHIP CAPA CERAMIC M/L H.D F/S	0.047U 50V K X7R 2.0X1.2 R/TP	
		C348	0CH1473K516	CHIP CAPA CERAMIC M/L H.D F/S	0.047U 50V K X7R 2.0X1.2 R/TP	
		C349	0CH1333K566	CAPACITOR,CHIP[CERAMIC M/L HD	0.0330UF 50V K X7R(X) 2012 R/T	
		C350	0CE4764F638	CAPACITOR,ELECTROLYTIC	47M SRA/SS 16V M FM5 TP(5)	
		C351	0CH1104K946	CAPACITOR,FIXED CERAMIC(TEMP.C	0.1UF 2012 50V 80%,-20% Y5V(F)	
		C354	0CH1104K946	CAPACITOR,FIXED CERAMIC(TEMP.C	0.1UF 2012 50V 80%,-20% Y5V(F)	
		C355	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C360	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C500	0CE4775C638	CAPACITOR,FIXED ELECTROLYTIC	470UF SR,SV 6.3V 20% FM5 TP 5	
		C501	0CH1104K946	CAPACITOR,FIXED CERAMIC(TEMP.C	0.1UF 2012 50V 80%,-20% Y5V(F)	
		C502	0CH1104K946	CAPACITOR,FIXED CERAMIC(TEMP.C	0.1UF 2012 50V 80%,-20% Y5V(F)	
		C503	0CE2274C638	CAPACITOR,ELECTROLYTIC	220M SRA 6.3V M FM5 TP(5)	
		C504	0CH1223K516	CAPA,CHIP CERAMIC M/L H.D F/S	0.022U 50V K B 2.0X1.2 R/TP	
		C505	0CH1104K946	CAPACITOR,FIXED CERAMIC(TEMP.C	0.1UF 2012 50V 80%,-20% Y5V(F)	
		C508	0CH1223K516	CAPA,CHIP CERAMIC M/L H.D F/S	0.022U 50V K B 2.0X1.2 R/TP	
		C511	0CH1223K516	CAPA,CHIP CERAMIC M/L H.D F/S	0.022U 50V K B 2.0X1.2 R/TP	
		C514	0CH4240K416	CAPACITOR,CHIP[CERAMIC M/L TC	24PF 50V J NP0 2012 R/TP	
		C515	0CH4270K416	CHIP CAPA CERAMIC M/L T.C F/S	27P 50V J COG 2.0X1.2 R/TP	
		C519	0CH1223K516	CAPA,CHIP CERAMIC M/L H.D F/S	0.022U 50V K B 2.0X1.2 R/TP	
		C520	0CH1223K516	CAPA,CHIP CERAMIC M/L H.D F/S	0.022U 50V K B 2.0X1.2 R/TP	
		C525	0CH1104K946	CAPACITOR,FIXED CERAMIC(TEMP.C	0.1UF 2012 50V 80%,-20% Y5V(F)	
		C526	0CE4765K618	CAPACITOR,AL.ELECTROLYTIC	47UF SR,SV 50V M FL TP 5	
		C531	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C534	0CH1105F946	CAPACITOR,CHIP[CERAMIC M/L HD	1UF 16V Z Y5V(F) 2012 R/TP	
		C535	0CH1105F946	CAPACITOR,CHIP[CERAMIC M/L HD	1UF 16V Z Y5V(F) 2012 R/TP	
		C542	0CH4681K416	CAPA,CHIP CERAMIC M/L T.C F/S	680PF 50V J NP0 2012 R/TP	
		C543	0CH1223K516	CAPA,CHIP CERAMIC M/L H.D F/S	0.022U 50V K B 2.0X1.2 R/TP	
		C544	0CH1473K516	CHIP CAPA CERAMIC M/L H.D F/S	0.047U 50V K X7R 2.0X1.2 R/TP	
		C545	0CH1223K516	CAPA,CHIP CERAMIC M/L H.D F/S	0.022U 50V K B 2.0X1.2 R/TP	
		C546	0CE4764H638	CAPACITOR,FIXED ELECTROLYTIC	47M SRA 25V M FM5 TP(5)	
		C551	0CH1333H516	CHIP CAPA CERAMIC M/L H.D F/S	0.033U 25V K B 2.0X1.25 R/TP	
		C552	0CH1103K516	CHIP CAPA CERAMIC M/L H.D F/S	0.01U 50V K B 2.0X1.25 R/TP	
		C561	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C566	0CH4102K416	CAPACITOR,FIXED CERAMIC(High d	1000PF 50V 5% NP0 2012 R/TP	
		C567	0CH4102K416	CAPACITOR,FIXED CERAMIC(High d	1000PF 50V 5% NP0 2012 R/TP	
		C568	0CH4102K416	CAPACITOR,FIXED CERAMIC(High d	1000PF 50V 5% NP0 2012 R/TP	
		C569	0CH4102K416	CAPACITOR,FIXED CERAMIC(High d	1000PF 50V 5% NP0 2012 R/TP	
		C570	0CH4180K416	CHIP CAPA CERAMIC M/L T.C F/S	18P 50V J C 2.0X1.2 R/TP	
		C571	0CH4180K416	CHIP CAPA CERAMIC M/L T.C F/S	18P 50V J C 2.0X1.2 R/TP	
		C572	0CH1223K516	CAPA,CHIP CERAMIC M/L H.D F/S	0.022U 50V K B 2.0X1.2 R/TP	
		C573	0CH1103K516	CHIP CAPA CERAMIC M/L H.D F/S	0.01U 50V K B 2.0X1.25 R/TP	
		C574	0CH4102K416	CAPACITOR,FIXED CERAMIC(High d	1000PF 50V 5% NP0 2012 R/TP	
		C577	0CH1223K516	CAPA,CHIP CERAMIC M/L H.D F/S	0.022U 50V K B 2.0X1.2 R/TP	
		C578	0CE2274C638	CAPACITOR,ELECTROLYTIC	220M SRA 6.3V M FM5 TP(5)	
		C579	0CE2274C638	CAPACITOR,ELECTROLYTIC	220M SRA 6.3V M FM5 TP(5)	
		C580	0CH1223K516	CAPA,CHIP CERAMIC M/L H.D F/S	0.022U 50V K B 2.0X1.2 R/TP	
		C581	0CH1103K516	CHIP CAPA CERAMIC M/L H.D F/S	0.01U 50V K B 2.0X1.25 R/TP	
		C582	0CH1103K516	CHIP CAPA CERAMIC M/L H.D F/S	0.01U 50V K B 2.0X1.25 R/TP	
		C583	0CH4102K416	CAPACITOR,FIXED CERAMIC(High d	1000PF 50V 5% NP0 2012 R/TP	
		C584	0CE4764C638	CAPACITOR,ELECTROLYTIC	47M SRA 6.3V M FM5 TP(5)	
		C585	0CH1103K516	CHIP CAPA CERAMIC M/L H.D F/S	0.01U 50V K B 2.0X1.25 R/TP	
		C586	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C588	0CH4102K416	CAPACITOR,FIXED CERAMIC(High d	1000PF 50V 5% NP0 2012 R/TP	
		C589	0CH4221K416	CAPA,CHIP CERAMIC M/L T.C F/S	220P 50V J 2.0X1.25 R/TP	

S	AL	LOCA. NO.	LG PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		C590	0CH1105F946	CAPACITOR,CHIP[CERAMIC M/L HD	1UF 16V Z Y5V(F) 2012 R/TP	
		C592	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C593	0CH4471K416	CAPA,CHIP CERAMIC M/L T.C F/S	470P 50V J 2.0*1.25 R/TP	
		C594	0CH1104K946	CAPACITOR,FIXED CERAMIC(TEMP.C	0.1UF 2012 50V 80%,-20% Y5V(F)	
		C595	0CH4120K416	CHIP CAPA CERAMIC M/L T.C F/S	12P 50V NPO 2.0X1.25 R/TP	
		C596	0CH4180K416	CHIP CAPA CERAMIC M/L T.C F/S	18P 50V J C 2.0X1.2 R/TP	
		C597	0CH4681K416	CAPA,CHIP CERAMIC M/L T.C F/S	680PF 50V J NP0 2012 R/TP	
		C598	0CH1104K946	CAPACITOR,FIXED CERAMIC(TEMP.C	0.1UF 2012 50V 80%,-20% Y5V(F)	
		C599	0CH1223K516	CAPA,CHIP CERAMIC M/L H.D F/S	0.022U 50V K B 2.0X1.2 R/TP	
		C5L1	0CH1105F946	CAPACITOR,CHIP[CERAMIC M/L HD	1UF 16V Z Y5V(F) 2012 R/TP	
		C602	0CE1074F638	CAPACITOR,ELECTROLYTIC	100U SRA 16V M FM5 TP(5)	
		C603	0CE4775C638	CAPACITOR,FIXED ELECTROLYTIC	470UF SR,SV 6.3V 20% FM5 TP 5	
		C604	0CE1074F638	CAPACITOR,ELECTROLYTIC	100U SRA 16V M FM5 TP(5)	
		C607	0CH1104K946	CAPACITOR,FIXED CERAMIC(TEMP.C	0.1UF 2012 50V 80%,-20% Y5V(F)	
		C608	0CH1104K946	CAPACITOR,FIXED CERAMIC(TEMP.C	0.1UF 2012 50V 80%,-20% Y5V(F)	
		C611	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C612	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C613	0CE4775C638	CAPACITOR,FIXED ELECTROLYTIC	470UF SR,SV 6.3V 20% FM5 TP 5	
		C614	0CE2274C638	CAPACITOR,ELECTROLYTIC	220M SRA 6.3V M FM5 TP(5)	
		C615	0CE4775C638	CAPACITOR,FIXED ELECTROLYTIC	470UF SR,SV 6.3V 20% FM5 TP 5	
		C616	0CE1074F638	CAPACITOR,ELECTROLYTIC	100U SRA 16V M FM5 TP(5)	
		C701	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC	4.7UF SRA,SS 50V 20% FM5 TP 5	
		C702	0CE2274C638	CAPACITOR,ELECTROLYTIC	220M SRA 6.3V M FM5 TP(5)	
		C703	0CH1104K946	CAPACITOR,FIXED CERAMIC(TEMP.C	0.1UF 2012 50V 80%,-20% Y5V(F)	
		C704	0CH1104K946	CAPACITOR,FIXED CERAMIC(TEMP.C	0.1UF 2012 50V 80%,-20% Y5V(F)	
		C706	0CH4300K416	CHIP CAPA CERAMIC M/L T.C F/S	30P 50V J CH 2.0X1.2 R/TP	
		C707	0CH4300K416	CHIP CAPA CERAMIC M/L T.C F/S	30P 50V J CH 2.0X1.2 R/TP	
		C708	0CH1104K946	CAPACITOR,FIXED CERAMIC(TEMP.C	0.1UF 2012 50V 80%,-20% Y5V(F)	
		C731	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C751	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC	4.7UF SRA,SS 50V 20% FM5 TP 5	
		C752	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C801	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC	4.7UF SRA,SS 50V 20% FM5 TP 5	
		C803	0CH1102K516	CHIP CAPA CERAMIC M/L H.D F/S	1000P 50V K B 2.0X1.25 R/TP	
		C804	0RH0000D622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 10 W 2012 5.00% D	
		C806	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC	4.7UF SRA,SS 50V 20% FM5 TP 5	
		C807	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC	4.7UF SRA,SS 50V 20% FM5 TP 5	
		C808	0CE1054K638	CAPACITOR,ELECTROLYTIC	1.0M SRA/SS50V M FM5 TP(5)	
		C816	0CE2254K638	CAPACITOR,FIXED ELECTROLYTIC	2.2UF SRA,SS 50V 20% FM5 TP 5	
		C821	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C822	0CH1222K516	CHIP CAPA CERAMIC M/L H.D F/S	2200P 50V K B 2.0X1.25 R/TP	
		C823	0CH1104K946	CAPACITOR,FIXED CERAMIC(TEMP.C	0.1UF 2012 50V 80%,-20% Y5V(F)	
		C825	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C826	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C827	0CH1105F946	CAPACITOR,CHIP[CERAMIC M/L HD	1UF 16V Z Y5V(F) 2012 R/TP	
		C828	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C829	0CE2264F638	CAPACITOR,ELECTROLYTIC	22M SRA 16V M FM5 TP(5)	
		C830	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C831	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC	4.7UF SRA,SS 50V 20% FM5 TP 5	
		C832	0CH1103K516	CHIP CAPA CERAMIC M/L H.D F/S	0.01U 50V K B 2.0X1.25 R/TP	
		C833	0CE2264F638	CAPACITOR,ELECTROLYTIC	22M SRA 16V M FM5 TP(5)	
		C834	0CH1472K516	CAPA,CHIP CERAMIC M/L H.D F/S	4700P 50V K B 2.0*1.25 R/TP	
		C836	0CH1103K516	CHIP CAPA CERAMIC M/L H.D F/S	0.01U 50V K B 2.0X1.25 R/TP	
		C838	0CH1104K946	CAPACITOR,FIXED CERAMIC(TEMP.C	0.1UF 2012 50V 80%,-20% Y5V(F)	
		C839	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC	4.7UF SRA,SS 50V 20% FM5 TP 5	
		C840	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C841	0CH1103K516	CHIP CAPA CERAMIC M/L H.D F/S	0.01U 50V K B 2.0X1.25 R/TP	
		C842	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C843	0CE2264F638	CAPACITOR,ELECTROLYTIC	22M SRA 16V M FM5 TP(5)	

S	AL	LOCA. NO.	LG PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		C844	0CH1472K516	CAPA,CHIP CERAMIC M/L H.D F/S	4700P 50V K B 2.0*1.25 R/TP	
		C845	0CH1103K516	CHIP CAPA CERAMIC M/L H.D F/S	0.01U 50V K B 2.0X1.25 R/TP	
		C846	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC	4.7UF SRA,SS 50V 20% FM5 TP 5	
		C847	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C848	0CH1105F946	CAPACITOR,CHIP[CERAMIC M/L HD	1UF 16V Z Y5V(F) 2012 R/TP	
		C849	0CH1105F946	CAPACITOR,CHIP[CERAMIC M/L HD	1UF 16V Z Y5V(F) 2012 R/TP	
		C851	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC	4.7UF SRA,SS 50V 20% FM5 TP 5	
		C853	0CH1102K516	CHIP CAPA CERAMIC M/L H.D F/S	1000P 50V K B 2.0X1.25 R/TP	
		C854	0RH0000D622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 10 W 2012 5.00% D	
		C866	0CE2254K638	CAPACITOR,FIXED ELECTROLYTIC	2.2UF SRA,SS 50V 20% FM5 TP 5	
		C871	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC	4.7UF SRA,SS 50V 20% FM5 TP 5	
		C872	0CH4560K416	CHIP CAPA CERAMIC M/L T.C F/S	56P 50V J NPO 2.0X1.25 R/TP	
		C873	0CE2254K638	CAPACITOR,FIXED ELECTROLYTIC	2.2UF SRA,SS 50V 20% FM5 TP 5	
		C874	0CH1105F946	CAPACITOR,CHIP[CERAMIC M/L HD	1UF 16V Z Y5V(F) 2012 R/TP	
		C875	0CH1333K566	CAPACITOR,CHIP[CERAMIC M/L HD	0.0330UF 50V K X7R(X) 2012 R/T	
		C876	0CE1054K638	CAPACITOR,ELECTROLYTIC	1.0M SRA/SS50V M FM5 TP(5)	
		C877	0CE1054K638	CAPACITOR,ELECTROLYTIC	1.0M SRA/SS50V M FM5 TP(5)	
		C878	0CH4560K416	CHIP CAPA CERAMIC M/L T.C F/S	56P 50V J NPO 2.0X1.25 R/TP	
		C879	0CE2254K638	CAPACITOR,FIXED ELECTROLYTIC	2.2UF SRA,SS 50V 20% FM5 TP 5	
		C880	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC	4.7UF SRA,SS 50V 20% FM5 TP 5	
		C881	0CE1054K638	CAPACITOR,ELECTROLYTIC	1.0M SRA/SS50V M FM5 TP(5)	
		C882	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C883	0CE1054K638	CAPACITOR,ELECTROLYTIC	1.0M SRA/SS50V M FM5 TP(5)	
		C884	0CH1104K946	CAPACITOR,FIXED CERAMIC(TEMP.C	0.1UF 2012 50V 80%,-20% Y5V(F)	
		C885	0CH1104K946	CAPACITOR,FIXED CERAMIC(TEMP.C	0.1UF 2012 50V 80%,-20% Y5V(F)	
		C886	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC	4.7UF SRA,SS 50V 20% FM5 TP 5	
		C887	0CE3354K638	CAPACITOR,FIXED ELECTROLYTIC	3.3UF SRA,SS 50V 20% FM5 TP 5	
		C888	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC	4.7UF SRA,SS 50V 20% FM5 TP 5	
		C889	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC	4.7UF SRA,SS 50V 20% FM5 TP 5	
		CS501	6600M000026	SWITCH,PUSH	MPU12970MLB0 VCR CST IN S/W MI	
		D802	0DS141489BB	DIODE,SWITCHING	1N4148 26MM TP GRANDE DO34 75V	
		ES501	4931R-0050A	HOLDER ASSY	END	
		ES502	4931R-0050A	HOLDER ASSY	END	
		F601	6200HJC901A	FILTER(CIRC),EMC	CFI06B1H101MF SAMHWA TP 2-5K	
		F602	6200HJC901A	FILTER(CIRC),EMC	CFI06B1H101MF SAMHWA TP 2-5K	
		F603	6200HJC901A	FILTER(CIRC),EMC	CFI06B1H101MF SAMHWA TP 2-5K	
		F604	6200HJC901A	FILTER(CIRC),EMC	CFI06B1H101MF SAMHWA TP 2-5K	
		F605	6200HJC901A	FILTER(CIRC),EMC	CFI06B1H101MF SAMHWA TP 2-5K	
		FL301	633-032K	COIL,IFT	BIAC OSC,1CHIP 5V(KS-75M) KWAN	
		IC301	0ILNRSA012A	IC,LINEAR	LA71206M-MPB SANYO 80PIN QFP T	
		IC302	0IJR223400D	IC,JRC	NJM2234L SIP8 ST S/W IC(3INPUT	
		IC501	0IMCRMI051C	IC,MICRO CONTROLLER	M37762MCA-1M8GP MITSUBISHI 100	
		IC504	0IKE703100A	IC,KEC	KIA7031P 3P 3.1V RESET(TAPING)	
		IC505	0IKE704200B	IC,KEC	KIA7042P 3P 4.2V RESET(TAPING)	
		IC602	0IPRPMT006A	IC,PERIPHERALS	MM1225XFBE MITSUMI 8PIN SOP R/	
		IC801	0ILNRSA013A	IC,LINEAR	LA72670M-MPB SANYO 80PIN QFP T	
		J802	0RH0000D622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 10 W 2012 5.00% D	
		JK601	6612J00025E	JACK,RCA	RCA/DIN-36(SILVER) YUQIU	
		L301	0LR1000K035	INDUCTOR RADIAL LEAD	100M K 6X6 L5 TP	
		L303	0LR1000K035	INDUCTOR RADIAL LEAD	100M K 6X6 L5 TP	
		L305	0LR0102K035	INDUCTOR RADIAL LEAD	10M K 6X6 L5 TP	
		L501	0LR1000K035	INDUCTOR RADIAL LEAD	100M K 6X6 L5 TP	
		L510	0LR0682K035	INDUCTOR RADIAL LEAD	68M K 6X6 L5 TP	
		L511	0LR0221J0N5	INDUCTOR,RADIAL LEAD	2.2UH 5% TP 3X5 TR5	
		L512	0LR1000K035	INDUCTOR RADIAL LEAD	100M K 6X6 L5 TP	
		L706	0LR0102K035	INDUCTOR RADIAL LEAD	10M K 6X6 L5 TP	
		L822	0LR1000K035	INDUCTOR RADIAL LEAD	100M K 6X6 L5 TP	
		LD501	4931R-0017A	HOLDER ASSY	LED	

S	AL	LOCA. NO.	LG PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		MS501	6600JB8005C	SWITCH,MODE	MMS00721ZMB0 MIC 5VDC 1MA D-35	
		MS501	6600JB8005B	SWITCH,MODE	NON 5V 1MA VERTICAL -G	
		Q301	0TR150409AC	TRANSISTOR	KTA1504-GR-T1(ASG) CHIP KEC	
		Q302	0TR387509AC	TRANSISTOR	CHIP KTC3875S-GR-T1(ALG) KEC	
		Q303	0TR387509AC	TRANSISTOR	CHIP KTC3875S-GR-T1(ALG) KEC	
		Q304	0TR320309AA	TRANSISTOR,BIPOLARS	KTC3203 KEC TP TO92 50V 150MA	
		Q305	0TR928009AD	TRANSISTOR	KSA928A-Y,TO-92L TP SAMSUNG TO	
		Q305	0TR127309AA	TRANSISTOR	KTA1273-TP-Y (KTA966A)KEC	
		Q306	0TR150409AC	TRANSISTOR	KTA1504-GR-T1(ASG) CHIP KEC	
		Q307	0TR150409AC	TRANSISTOR	KTA1504-GR-T1(ASG) CHIP KEC	
		Q308	0TR928009AD	TRANSISTOR	KSA928A-Y,TO-92L TP SAMSUNG TO	
		Q308	0TR127309AA	TRANSISTOR	KTA1273-TP-Y (KTA966A)KEC	
		Q309	0TR103009AA	TRANSISTOR	CHIP KRC103S-T1(NC)22-22 KEC	
		Q310	0TR103009AC	TRANSISTOR	KRA103S-T1(PC)22-22 CHIP KEC	
		Q501	0TR387509AC	TRANSISTOR	CHIP KTC3875S-GR-T1(ALG) KEC	
		Q503	0TR127309AA	TRANSISTOR	KTA1273-TP-Y (KTA966A)KEC	
		Q504	0TR387509AC	TRANSISTOR	CHIP KTC3875S-GR-T1(ALG) KEC	
		Q505	0TR387509AC	TRANSISTOR	CHIP KTC3875S-GR-T1(ALG) KEC	
		Q506	0TR103009AA	TRANSISTOR	CHIP KRC103S-T1(NC)22-22 KEC	
		Q507	0TR150409AC	TRANSISTOR	KTA1504-GR-T1(ASG) CHIP KEC	
		Q601	0TR387509AC	TRANSISTOR	CHIP KTC3875S-GR-T1(ALG) KEC	
		Q602	0TR387509AC	TRANSISTOR	CHIP KTC3875S-GR-T1(ALG) KEC	
		Q701	0TR320309AA	TRANSISTOR,BIPOLARS	KTC3203 KEC TP TO92 50V 150MA	
		Q702	0TR127309AA	TRANSISTOR	KTA1273-TP-Y (KTA966A)KEC	
		Q703	0TR103009AA	TRANSISTOR	CHIP KRC103S-T1(NC)22-22 KEC	
		Q805	0TR387509AC	TRANSISTOR	CHIP KTC3875S-GR-T1(ALG) KEC	
		R301	0RH1002D622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 10 W 2012 5.00% D	
		R302	0RH2702D622	RESISTOR,METAL GLAZED(CHIP)	27K OHM 1 / 10 W 2012 5.00% D	
		R303	0RH1001D622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 10 W 2012 5.00% D	
		R304	0RH2201D622	RESISTOR,METAL GLAZED(CHIP)	2.2K OHM 1 / 10 W 2012 5.00% D	
		R305	0RH5600D622	RESISTOR,METAL GLAZED(CHIP)	560 OHM 1 / 10 W 2012 5.00% D	
		R306	0RH0472D622	RESISTOR,METAL GLAZED(CHIP)	47 OHM 1 / 10 W 2012 5.00% D	
		R307	0RH1001D622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 10 W 2012 5.00% D	
		R308	0RH0221D622	RESISTOR,METAL GLAZED(CHIP)	2.2 OHM 1 / 10 W 2012 5.00% D	
		R309	0RH2202D622	RESISTOR,METAL GLAZED(CHIP)	22K OHM 1 / 10 W 2012 5.00% D	
		R310	0RH2201D622	RESISTOR,METAL GLAZED(CHIP)	2.2K OHM 1 / 10 W 2012 5.00% D	
		R311	0RH3301D622	RESISTOR,METAL GLAZED(CHIP)	3.3K OHM 1 / 10 W 2012 5.00% D	
		R312	0RH3901D622	RESISTOR,METAL GLAZED(CHIP)	3.9K OHM 1 / 10 W 2012 5.00% D	
		R313	0RH1801D622	RESISTOR,METAL GLAZED(CHIP)	1.8K OHM 1 / 10 W 2012 5.00% D	
		R317	0RH8201D622	RESISTOR,METAL GLAZED(CHIP)	8.2K OHM 1 / 10 W 2012 5.00% D	
		R318	0RH3303D622	RESISTOR,METAL GLAZED(CHIP)	330K OHM 1 / 10 W 2012 5.00% D	
		R319	0RH1202D622	RESISTOR,METAL GLAZED(CHIP)	12K OHM 1 / 10 W 2012 5.00% D	
		R320	0RH1500D622	RESISTOR,METAL GLAZED(CHIP)	150 OHM 1 / 10 W 2012 5.00% D	
		R321	0RH2702D622	RESISTOR,METAL GLAZED(CHIP)	27K OHM 1 / 10 W 2012 5.00% D	
		R322	0RH1001D622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 10 W 2012 5.00% D	
		R324	0RH1001D622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 10 W 2012 5.00% D	
		R325	0RH1001D622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 10 W 2012 5.00% D	
		R326	0RH1502D622	RESISTOR,METAL GLAZED(CHIP)	15K OHM 1 / 10 W 2012 5.00% D	
		R327	0RH6801D622	RESISTOR,METAL GLAZED(CHIP)	6.8K OHM 1 / 10 W 2012 5.00% D	
		R328	0RH1501D622	RESISTOR,METAL GLAZED(CHIP)	1.5K OHM 1 / 10 W 2012 5.00% D	
		R331	0RH2201D622	RESISTOR,METAL GLAZED(CHIP)	2.2K OHM 1 / 10 W 2012 5.00% D	
		R332	0RH1801D622	RESISTOR,METAL GLAZED(CHIP)	1.8K OHM 1 / 10 W 2012 5.00% D	
		R333	0RH1201D622	RESISTOR,METAL GLAZED(CHIP)	1.2K OHM 1 / 10 W 2012 5.00% D	
		R335	0RH8201D622	RESISTOR,METAL GLAZED(CHIP)	8.2K OHM 1 / 10 W 2012 5.00% D	
		R336	0RH1202D622	RESISTOR,METAL GLAZED(CHIP)	12K OHM 1 / 10 W 2012 5.00% D	
		R337	0RH2202D622	RESISTOR,METAL GLAZED(CHIP)	22K OHM 1 / 10 W 2012 5.00% D	
		R338	0RH1002D622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 10 W 2012 5.00% D	
		R339	0RH1802D622	RESISTOR,METAL GLAZED(CHIP)	18K OHM 1 / 10 W 2012 5.00% D	

S	AL	LOCA. NO.	LG PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		R340	0RH1501D622	RESISTOR,METAL GLAZED(CHIP)	1.5K OHM 1 / 10 W 2012 5.00% D	
		R341	0RH1000D622	RESISTOR,METAL GLAZED(CHIP)	100 OHM 1 / 10 W 2012 5.00% D	
		R342	0RH4700D622	RESISTOR,METAL GLAZED(CHIP)	470 OHM 1 / 10 W 2012 5.00% D	
		R344	0RH1000D622	RESISTOR,METAL GLAZED(CHIP)	100 OHM 1 / 10 W 2012 5.00% D	
		R345	0RH0000D622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 10 W 2012 5.00% D	
		R346	0RH0000D622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 10 W 2012 5.00% D	
		R348	0RH2202D622	RESISTOR,METAL GLAZED(CHIP)	22K OHM 1 / 10 W 2012 5.00% D	
		R349	0RH0000D622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 10 W 2012 5.00% D	
		R501	0RH1000D622	RESISTOR,METAL GLAZED(CHIP)	100 OHM 1 / 10 W 2012 5.00% D	
		R502	0RH1000D622	RESISTOR,METAL GLAZED(CHIP)	100 OHM 1 / 10 W 2012 5.00% D	
		R504	0RH1001D622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 10 W 2012 5.00% D	
		R505	0RH1001D622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 10 W 2012 5.00% D	
		R506	0RH0000D622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 10 W 2012 5.00% D	
		R507	0RH4701D622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 10 W 2012 5.00% D	
		R508	0RH2702D622	RESISTOR,METAL GLAZED(CHIP)	27K OHM 1 / 10 W 2012 5.00% D	
		R509	0RH6800D622	RESISTOR,METAL GLAZED(CHIP)	680 OHM 1 / 10 W 2012 5.00% D	
		R510	0RH0000D622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 10 W 2012 5.00% D	
		R511	0RH1001D622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 10 W 2012 5.00% D	
		R512	0RH1001D622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 10 W 2012 5.00% D	
		R514	0RH0000D622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 10 W 2012 5.00% D	
		R515	0RH2700D622	RESISTOR,METAL GLAZED(CHIP)	270 OHM 1 / 10 W 2012 5.00% D	
		R517	0RH0000D622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 10 W 2012 5.00% D	
		R518	0RH1000D622	RESISTOR,METAL GLAZED(CHIP)	100 OHM 1 / 10 W 2012 5.00% D	
		R519	0RH1000D622	RESISTOR,METAL GLAZED(CHIP)	100 OHM 1 / 10 W 2012 5.00% D	
		R520	0RH1000D622	RESISTOR,METAL GLAZED(CHIP)	100 OHM 1 / 10 W 2012 5.00% D	
		R521	0RH2701D622	RESISTOR,METAL GLAZED(CHIP)	2.7K OHM 1 / 10 W 2012 5.00% D	
		R522	0RH1001D622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 10 W 2012 5.00% D	
		R523	0RH5601D622	RESISTOR,METAL GLAZED(CHIP)	5.6K OHM 1 / 10 W 2012 5.00% D	
		R524	0RH0000D622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 10 W 2012 5.00% D	
		R525	0RH1002D622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 10 W 2012 5.00% D	
		R526	0RH1002D622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 10 W 2012 5.00% D	
		R527	0RH1001D622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 10 W 2012 5.00% D	
		R528	0RH2701D622	RESISTOR,METAL GLAZED(CHIP)	2.7K OHM 1 / 10 W 2012 5.00% D	
		R529	0RH1002D622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 10 W 2012 5.00% D	
		R530	0RH0000D622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 10 W 2012 5.00% D	
		R531	0RH4701D622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 10 W 2012 5.00% D	
		R533	0RH1002D622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 10 W 2012 5.00% D	
		R534	0RH1002D622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 10 W 2012 5.00% D	
		R535	0RH4701D622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 10 W 2012 5.00% D	
		R536	0RH1001D622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 10 W 2012 5.00% D	
		R537	0RH4701D622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 10 W 2012 5.00% D	
		R538	0RH1001D622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 10 W 2012 5.00% D	
		R539	0RH0000D622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 10 W 2012 5.00% D	
		R540	0RH4701D622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 10 W 2012 5.00% D	
		R541	0RH2201D622	RESISTOR,METAL GLAZED(CHIP)	2.2K OHM 1 / 10 W 2012 5.00% D	
		R542	0RH4701D622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 10 W 2012 5.00% D	
		R543	0RH1001D622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 10 W 2012 5.00% D	
		R544	0RH1003D622	RESISTOR,METAL GLAZED(CHIP)	100K OHM 1 / 10 W 2012 5.00% D	
		R545	0RH0000D622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 10 W 2012 5.00% D	
		R546	0RH4701D622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 10 W 2012 5.00% D	
		R547	0RH1002D622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 10 W 2012 5.00% D	
		R548	0RH0000D622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 10 W 2012 5.00% D	
		R550	0RH2200D622	RESISTOR,METAL GLAZED(CHIP)	220 OHM 1 / 10 W 2012 5.00% D	
		R553	0RH2200D622	RESISTOR,METAL GLAZED(CHIP)	220 OHM 1 / 10 W 2012 5.00% D	
		R554	0RH1004D622	RESISTOR,METAL GLAZED(CHIP)	1M OHM 1 / 10 W 2012 5.00% D	
		R555	0RH2200D622	RESISTOR,METAL GLAZED(CHIP)	220 OHM 1 / 10 W 2012 5.00% D	
		R556	0RH2202D622	RESISTOR,METAL GLAZED(CHIP)	22K OHM 1 / 10 W 2012 5.00% D	
		R557	0RH2702D622	RESISTOR,METAL GLAZED(CHIP)	27K OHM 1 / 10 W 2012 5.00% D	

S	AL	LOCA. NO.	LG PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		R558	0RH2202D622	RESISTOR,METAL GLAZED(CHIP)	22K OHM 1 / 10 W 2012 5.00% D	
		R563	0RH4701D622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 10 W 2012 5.00% D	
		R564	0RH2702D622	RESISTOR,METAL GLAZED(CHIP)	27K OHM 1 / 10 W 2012 5.00% D	
		R566	0RH2701D622	RESISTOR,METAL GLAZED(CHIP)	2.7K OHM 1 / 10 W 2012 5.00% D	
		R569	0RH4701D622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 10 W 2012 5.00% D	
		R570	0RH4701D622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 10 W 2012 5.00% D	
		R571	0RH2200D622	RESISTOR,METAL GLAZED(CHIP)	220 OHM 1 / 10 W 2012 5.00% D	
		R575	0RH4701D622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 10 W 2012 5.00% D	
		R576	0RH4701D622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 10 W 2012 5.00% D	
		R577	0RH4701D622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 10 W 2012 5.00% D	
		R578	0RH4701D622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 10 W 2012 5.00% D	
		R579	0RH5602D622	RESISTOR,METAL GLAZED(CHIP)	56K OHM 1 / 10 W 2012 5.00% D	
		R580	0RH1202D622	RESISTOR,METAL GLAZED(CHIP)	12K OHM 1 / 10 W 2012 5.00% D	
		R581	0RH2201D622	RESISTOR,METAL GLAZED(CHIP)	2.2K OHM 1 / 10 W 2012 5.00% D	
		R582	0RH4701D622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 10 W 2012 5.00% D	
		R583	0RH1002D622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 10 W 2012 5.00% D	
		R586	0RH1801D622	RESISTOR,METAL GLAZED(CHIP)	1.8K OHM 1 / 10 W 2012 5.00% D	
		R587	0RH1801D622	RESISTOR,METAL GLAZED(CHIP)	1.8K OHM 1 / 10 W 2012 5.00% D	
		R588	0RH2701D622	RESISTOR,METAL GLAZED(CHIP)	2.7K OHM 1 / 10 W 2012 5.00% D	
		R589	0RH1501D622	RESISTOR,METAL GLAZED(CHIP)	1.5K OHM 1 / 10 W 2012 5.00% D	
		R592	0RH1002D622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 10 W 2012 5.00% D	
		R593	0RH1002D622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 10 W 2012 5.00% D	
		R594	0RH1001D622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 10 W 2012 5.00% D	
		R595	0RH1001D622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 10 W 2012 5.00% D	
		R596	0RH1002D622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 10 W 2012 5.00% D	
		R597	0RH2201D622	RESISTOR,METAL GLAZED(CHIP)	2.2K OHM 1 / 10 W 2012 5.00% D	
		R598	0RH1201D622	RESISTOR,METAL GLAZED(CHIP)	1.2K OHM 1 / 10 W 2012 5.00% D	
		R599	0RH1001D622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 10 W 2012 5.00% D	
		R5C6	0RH1001D622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 10 W 2012 5.00% D	
		R602	0RH0000D622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 10 W 2012 5.00% D	
		R603	0RH0000D622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 10 W 2012 5.00% D	
		R611	0RH0222D622	RESISTOR,METAL GLAZED(CHIP)	22 OHM 1 / 10 W 2012 5.00% D	
		R612	0RH0222D622	RESISTOR,METAL GLAZED(CHIP)	22 OHM 1 / 10 W 2012 5.00% D	
		R613	0RH1001D622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 10 W 2012 5.00% D	
		R625	0RH0752D622	RESISTOR,METAL GLAZED(CHIP)	75 OHM 1 / 10 W 2012 5.00% D	
		R626	0RH8202D622	RESISTOR,METAL GLAZED(CHIP)	82K OHM 1 / 10 W 2012 5.00% D	
		R627	0RH8202D622	RESISTOR,METAL GLAZED(CHIP)	82K OHM 1 / 10 W 2012 5.00% D	
		R628	0RH0752D622	RESISTOR,METAL GLAZED(CHIP)	75 OHM 1 / 10 W 2012 5.00% D	
		R702	0RH1001D622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 10 W 2012 5.00% D	
		R703	0RH3901D622	RESISTOR,METAL GLAZED(CHIP)	3.9K OHM 1 / 10 W 2012 5.00% D	
		R706	0RH6800D622	RESISTOR,METAL GLAZED(CHIP)	680 OHM 1 / 10 W 2012 5.00% D	
		R707	0RH6800D622	RESISTOR,METAL GLAZED(CHIP)	680 OHM 1 / 10 W 2012 5.00% D	
		R708	0RH3302D622	RESISTOR,METAL GLAZED(CHIP)	33K OHM 1 / 10 W 2012 5.00% D	
		R711	0RH1001D622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 10 W 2012 5.00% D	
		R751	0RH4701D622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 10 W 2012 5.00% D	
		R752	0RH3300D622	RESISTOR,METAL GLAZED(CHIP)	330 OHM 1 / 10 W 2012 5.00% D	
		R801	0RH1000D622	RESISTOR,METAL GLAZED(CHIP)	100 OHM 1 / 10 W 2012 5.00% D	
		R802	0RH4702D622	RESISTOR,METAL GLAZED(CHIP)	47K OHM 1 / 10 W 2012 5.00% D	
		R804	0RH4701D622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 10 W 2012 5.00% D	
		R805	0RH4702D622	RESISTOR,METAL GLAZED(CHIP)	47K OHM 1 / 10 W 2012 5.00% D	
		R806	0RH7501D622	RESISTOR,METAL GLAZED(CHIP)	7.5K OHM 1 / 10 W 2012 5.00% D	
		R807	0RH5602D622	RESISTOR,METAL GLAZED(CHIP)	56K OHM 1 / 10 W 2012 5.00% D	
		R808	0RH2202D622	RESISTOR,METAL GLAZED(CHIP)	22K OHM 1 / 10 W 2012 5.00% D	
		R809	0RH1800D622	RESISTOR,METAL GLAZED(CHIP)	180 OHM 1 / 10 W 2012 5.00% D	
		R810	0RH1801D622	RESISTOR,METAL GLAZED(CHIP)	1.8K OHM 1 / 10 W 2012 5.00% D	
		R811	0RH5602D622	RESISTOR,METAL GLAZED(CHIP)	56K OHM 1 / 10 W 2012 5.00% D	
		R812	0RH7501D622	RESISTOR,METAL GLAZED(CHIP)	7.5K OHM 1 / 10 W 2012 5.00% D	
		R813	0RH5602D622	RESISTOR,METAL GLAZED(CHIP)	56K OHM 1 / 10 W 2012 5.00% D	

S	AL	LOCA. NO.	LG PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		R814	0RH7501D622	RESISTOR,METAL GLAZED(CHIP)	7.5K OHM 1 / 10 W 2012 5.00% D	
		R817	0RH1502D622	RESISTOR,METAL GLAZED(CHIP)	15K OHM 1 / 10 W 2012 5.00% D	
		R818	0RH4701D622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 10 W 2012 5.00% D	
		R821	0RH1002D622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 10 W 2012 5.00% D	
		R822	0RH1003D622	RESISTOR,METAL GLAZED(CHIP)	100K OHM 1 / 10 W 2012 5.00% D	
		R823	0RH4702D622	RESISTOR,METAL GLAZED(CHIP)	47K OHM 1 / 10 W 2012 5.00% D	
		R835	0RH0000D622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 10 W 2012 5.00% D	
		R836	0RH4700D622	RESISTOR,METAL GLAZED(CHIP)	470 OHM 1 / 10 W 2012 5.00% D	
		R837	0RH0000D622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 10 W 2012 5.00% D	
		R838	0RH2701D622	RESISTOR,METAL GLAZED(CHIP)	2.7K OHM 1 / 10 W 2012 5.00% D	
		R839	0RH3902D622	RESISTOR,METAL GLAZED(CHIP)	39K OHM 1 / 10 W 2012 5.00% D	
		R840	0RH0000D622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 10 W 2012 5.00% D	
		R842	0RH1000D622	RESISTOR,METAL GLAZED(CHIP)	100 OHM 1 / 10 W 2012 5.00% D	
		R843	0RH1000D622	RESISTOR,METAL GLAZED(CHIP)	100 OHM 1 / 10 W 2012 5.00% D	
		R844	0RH1000D622	RESISTOR,METAL GLAZED(CHIP)	100 OHM 1 / 10 W 2012 5.00% D	
		R845	0RH1000D622	RESISTOR,METAL GLAZED(CHIP)	100 OHM 1 / 10 W 2012 5.00% D	
		R851	0RH1000D622	RESISTOR,METAL GLAZED(CHIP)	100 OHM 1 / 10 W 2012 5.00% D	
		R856	0RH7501D622	RESISTOR,METAL GLAZED(CHIP)	7.5K OHM 1 / 10 W 2012 5.00% D	
		R857	0RH5602D622	RESISTOR,METAL GLAZED(CHIP)	56K OHM 1 / 10 W 2012 5.00% D	
		R858	0RH4702D622	RESISTOR,METAL GLAZED(CHIP)	47K OHM 1 / 10 W 2012 5.00% D	
		R866	0RH4702D622	RESISTOR,METAL GLAZED(CHIP)	47K OHM 1 / 10 W 2012 5.00% D	
		R867	0RH1502D622	RESISTOR,METAL GLAZED(CHIP)	15K OHM 1 / 10 W 2012 5.00% D	
		R874	0RH4701D622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 10 W 2012 5.00% D	
		R8C1	0RH0000D622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 10 W 2012 5.00% D	
		RS501	6500RAB003A	SENSOR	SG-260 KODENSHI D33 REEL SENSO	
		RS501	6500RAB007A	SENSOR	GP1S566V SHARP REEL SENSOR OF	
		RS502	6500RAB003A	SENSOR	SG-260 KODENSHI D33 REEL SENSO	
		RS502	6500RAB007A	SENSOR	GP1S566V SHARP REEL SENSOR OF	
		TU701	6700NFNL04A	TUNER	TADM-H102F(US,LGIT) LG INOTEK	
		TU701	6700NFNG04A	TUNER	TCMN0682PA20C(US,SS) SS NTSC F	
		X301	6202R1357AE	RESONATOR,CRYSTAL	HC49U SSANG TAE 3-579575MHZ 15	
		X301	6202R1357AC	RESONATOR,CRYSTAL	- BUBANG 3-579575M 15PPM SER	
		X501	6202R-DA01B	RESONATOR,CRYSTAL	CFS-308 CITIZEN 32.768KHZ +/-	
		X501	6212AC2327E	RESONATOR,CRYSTAL	C-001R SEIKO EPSON 32.768 KHZ	
		X502	6212AA2143F	RESONATOR,CRYSTAL	HC-49U KYUNGIL 14.31818MHZ +/-	
		X502	6202R1143DC	RESONATOR,CRYSTAL	H49U BUBANG 14-31818HZ 25PPM 1	
		ZD501	0DZ560009CJ	DIODE,ZENERS	GDZJ5.6B 26MM GRANDE TP26 DO34	
		ZD502	0DZ560009CJ	DIODE,ZENERS	GDZJ5.6B 26MM GRANDE TP26 DO34	
		ZD751	0DZ102609BB	DIODE,ZENER	UZ-10BSB 26MM TP PYUNG CHANG D	
		***	**BOARD ASSEMBLY , TIMER**	***		
		A49	3501R-9908A	BOARD ASSEMBLY	VCR VC663M TIMER	
		C601	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C6G1	0CE4775C638	CAPACITOR,FIXED ELECTROLYTIC	470UF SR,SV 6.3V 20% FM5 TP 5	
		C6G2	0CE4775C638	CAPACITOR,FIXED ELECTROLYTIC	470UF SR,SV 6.3V 20% FM5 TP 5	
		IC601	0ILNRPY001A	IC,LINEAR	PT6955 PTC 24P SOP ST LED DRIV	
		L601	0LR4700K035	INDUCTOR RADIAL LEAD	470M K 6X6 L5 TP	
		LD601	6301R2U008B	LED ASSEMBLY	TOS-3664AGMGMRMY-B OASIS UNIVE	
		LED601	0DL112000AK	DIODE,LED	DL-11S2GNS(SUPPER,GREEN,03)KOC	
		LED602	0DL342009DA	LED	SLR-342YY TP ROHM YELLOW 10	
		Q601	0TR103009AE	TRANSISTOR,BIPOLARS	KRC103M(KRC1203) KEC TP TO92M	
		Q602	0TR103009AE	TRANSISTOR,BIPOLARS	KRC103M(KRC1203) KEC TP TO92M	
		R604	0RD5602F608	RESISTOR,FIXED CARBON FILM	56K OHM 1/6 W 5% TA26	
		R605	0RD3300F608	RESISTOR,FIXED CARBON FILM	330 OHM 1/6 W 5% TA26	
		R611	0RD6800F608	RESISTOR,FIXED CARBON FILM	680 OHM 1/6 W 5% TA26	
		R612	0RD8200F608	RESISTOR,FIXED CARBON FILM	820 OHM 1/6 W 5% TA26	
		R613	0RD1201F608	RESISTOR,FIXED CARBON FILM	1.2K OHM 1/6 W 5% TA26	
		R614	0RD1501F608	RESISTOR,FIXED CARBON FILM	1.5K OHM 1/6 W 5% TA26	
		R615	0RD2201F608	RESISTOR,FIXED CARBON FILM	2.2K OHM 1/6 W 5% TA26	

S	AL	LOCA. NO.	LG PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		R616	0RD3301F608	RESISTOR,FIXED CARBON FILM	3.3K OHM 1/6 W 5% TA26	
		R617	0RD4701F608	RESISTOR,FIXED CARBON FILM	4.7K OHM 1/6 W 5% TA26	
		R621	0RD2701F608	RESISTOR,FIXED CARBON FILM	2.7K OHM 1/6 W 5% TA26	
		R622	0RD1501F608	RESISTOR,FIXED CARBON FILM	1.5K OHM 1/6 W 5% TA26	
		R630	0RD1500F608	RESISTOR,FIXED CARBON FILM	150 OHM 1/6 W 5% TA26	
		R631	0RD1500F608	RESISTOR,FIXED CARBON FILM	150 OHM 1/6 W 5% TA26	
		RC601	6712R1638GB	REMOTE CONTROLLER RECEIVER	TSOP4438RF1 VISHAY 38KHZ =TSOP	
		SW601	556-219B	SWITCH,TACT	THVV502GAA POSTECH DC 12 V 5-	
		SW602	556-219B	SWITCH,TACT	THVV502GAA POSTECH DC 12 V 5-	
		SW603	556-219B	SWITCH,TACT	THVV502GAA POSTECH DC 12 V 5-	
		SW604	556-219B	SWITCH,TACT	THVV502GAA POSTECH DC 12 V 5-	
		SW605	556-219B	SWITCH,TACT	THVV502GAA POSTECH DC 12 V 5-	
		SW606	556-219B	SWITCH,TACT	THVV502GAA POSTECH DC 12 V 5-	
		SW607	556-219B	SWITCH,TACT	THVV502GAA POSTECH DC 12 V 5-	
		SW612	556-219B	SWITCH,TACT	THVV502GAA POSTECH DC 12 V 5-	
		SW613	556-219B	SWITCH,TACT	THVV502GAA POSTECH DC 12 V 5-	
		*** BOARD ASSEMBLY , KEY ***				
		A42	3501R-9909A	BOARD ASSEMBLY	VCR VC663M TIMER	
		C611	0CN1020K518	CAPACITOR TUBULA(HIGH DIELE)	1000P 50V K B TA26	
		C612	0CN1020K518	CAPACITOR TUBULA(HIGH DIELE)	1000P 50V K B TA26	
		JK601	6612JH003AC	JACK,RCA	BJP-113D BAE EUN YELLOW	
		JK602	6612JH003AB	JACK,RCA	BJP-113C BAE EUN WHITE	
		JK603	6612JH003AA	JACK,RCA	BJP-113B BAE EUN RED	
		L602	0LA1000K018	INDUCTOR AXIAL LEAD	100M K 2.3X3.4 L5 TP	
		L603	0LA1000K018	INDUCTOR AXIAL LEAD	100M K 2.3X3.4 L5 TP	
		R618	0RD8201F608	RESISTOR,FIXED CARBON FILM	8.2K OHM 1/6 W 5% TA26	
		R619	0RD1502F608	RESISTOR,FIXED CARBON FILM	15K OHM 1/6 W 5% TA26	
		R620	0RD2702F608	RESISTOR,FIXED CARBON FILM	27K OHM 1/6 W 5% TA26	
		R623	0RD6800F608	RESISTOR,FIXED CARBON FILM	680 OHM 1/6 W 5% TA26	
		R624	0RD8200F608	RESISTOR,FIXED CARBON FILM	820 OHM 1/6 W 5% TA26	
		R641	0RD0752F608	RESISTOR,FIXED CARBON FILM	75 OHM 1/6 W 5.00% TA26	
		SW608	556-219B	SWITCH,TACT	THVV502GAA POSTECH DC 12 V 5-	
		SW609	556-219B	SWITCH,TACT	THVV502GAA POSTECH DC 12 V 5-	
		SW610	556-219B	SWITCH,TACT	THVV502GAA POSTECH DC 12 V 5-	
		SW611	556-219B	SWITCH,TACT	THVV502GAA POSTECH DC 12 V 5-	
		SW614	556-219B	SWITCH,TACT	THVV502GAA POSTECH DC 12 V 5-	
		SW615	556-219B	SWITCH,TACT	THVV502GAA POSTECH DC 12 V 5-	
		SW616	556-219B	SWITCH,TACT	THVV502GAA POSTECH DC 12 V 5-	
		*** PWB(PCB) ASSEMBLY , TOTAL POWER ***				
		A48	6871R-8511H	PWB(PCB) ASSEMBLY,TOTAL	COMBI MTK POWER	
		BD01	636-004C	FILTER(CIRC),EMC	BEAD CORE BFS3550R2FD8,R T/P	
		BD02	636-004C	FILTER(CIRC),EMC	BEAD CORE BFS3550R2FD8,R T/P	
		BD101	0DD160000DA	DIODE	S1WBA60(1A 600V) SHIDENKEN	
⚠		C101	624-088S	CAPACITOR,DRAWING	MPX104K ETR/EUROPTRONIC BULK	
⚠		C102	624-088S	CAPACITOR,DRAWING	MPX104K ETR/EUROPTRONIC BULK	
		C103	0CE157CR610	CAPACITOR,AL.ELECTROLYTIC	150UF SHL,SD 250V M FL BULK	
		C105	0CQ1031Y519	CAPACITOR,POLYESTER	0.01UF D 630V K PE NI TP	
		C106	624-087B	CAPACITOR	HIGH-VOL 100P/1KV SMPS SAMHWA	
		C107	0CE1054K638	CAPACITOR,ELECTROLYTIC	1.0M SRA/SS50V M FM5 TP(5)	
		C108	0CE336BH638	CAPACITOR,ELECTROLYTIC	33UF KME 25V M FM5 TP5	
		C109	0CN223AK948	CAPACITOR,TUBULAR(HIGH DIELEC)	0.022UF 50V Z F TA26 S	
⚠		C110	0CG1020U630	CAPACITOR,SEMI CERAMIC	1000PF 400V M E(Z5U) R	
⚠		C111	0CG2220U630	CAPACITOR,SEMI CERAMIC	2200 PF 400V M E R (NK,AD,SD)	
		C123	0CE477BH630	CAPACITOR,AL.ELECTROLYTIC	470UF KME TYPE 25V M FM5 BULK	
		C126	0CE2276H638	CAPACITOR,FIXED ELECTROLYTIC	220UF SMS,SG 25V 20% FM5 TP 5	
		C127	0CE108BF630	CAPACITOR,FIXED ELECTROLYTIC	1000UF KME 16V M FM5 BULK	
		C128	0CE3376D638	CAPACITOR,ELECTROLYTIC	330UF SMS 10V M FM5 TP5	
		C129	0CE228BF630	CAPACITOR,FIXED ELECTROLYTIC	2200UF KME TYPE 16V 20% FM5 BU	

S	AL	LOCA. NO.	LG PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		C131	624-082H	CAPACITOR	CE 1000UF/10V SHL(10*12.5)T/P	
		C132	624-085D	CAPACITOR	CE 47UF/50V KME (SMPS)	
		C133	0CQ1042K409	CAPACITOR,FIXED FILM	0.1UF S 50V J PE TP	
		C151	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC	4.7UF SRA,SS 50V 20% FM5 TP 5	
		C152	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC	4.7UF SRA,SS 50V 20% FM5 TP 5	
		C153	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C154	0CE1074F638	CAPACITOR,ELECTROLYTIC	100U SRA 16V M FM5 TP(5)	
		C155	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C159	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C161	0CE4764C638	CAPACITOR,ELECTROLYTIC	47M SRA 6.3V M FM5 TP(5)	
		C163	624-087H	CAPACITOR	HIGH-VOL 220PF/1KV CERAMIC	
		D101	0DD010009CA	DIODE,RECTIFIER	EG01CW(R-FORM 5MM) TP SANKEN	
		D101	0DD221009AA	DIODE,RECTIFIERS	ERA22-10 KFLB,TP ,R T/P,FUJI	
		D102	0DD010009AC	DIODE	EU01W(R-FORM) TP SANKEN	
		D110	0DR302000AB	DIODE,RECTIFIER	HER302 BK RECTRON DO201AD 100V	
		D111	0DR158220AA	DIODE,RECTIFIER	1N5822 BK RECTRON DO201AD 40V	
		D113	0DD010009AC	DIODE	EU01W(R-FORM) TP SANKEN	
		D114	0DR104009AB	DIODE,RECTIFIER	RL104 R. TP GULF SEMICONDUCTOR	
		D115	0DR104009AB	DIODE,RECTIFIER	RL104 R. TP GULF SEMICONDUCTOR	
		D118	0DR104510AA	DIODE,RECTIFIERS	B10A45V1 BK KEC TO220 45V 10A	
		D121	0DS141489BB	DIODE,SWITCHING	1N4148 26MM TP GRANDE DO34 75V	
⚠		F101	0FS1601B51B	FUSE,SLOW BLOW	1600MA 250 V 5.2X20 CY/GL KS /	
		FH01	586-008B	HOLDER	FUSE CLIP TP SINSUNG	
		FH02	586-008B	HOLDER	FUSE CLIP TP SINSUNG	
⚠		IC101	0IPMGFF001A	IC,POWER MANAGEMENT	ICE2B265 INFINEON 8 DIP ST SMP	
⚠		IC102	657-063A	SENSOR	LTV-817B,PHOTO COUPLER(LITEON)	
		IC103	0ISS431000A	IC,SAMSUNG ELECTRONICS	KA431AZ (LM431AZ)	
		IC151	0IPMGKE008B	IC,POWER MANAGEMENT	KIA78R08PI CU KEC 4P TO-220IS	
		IC151	0IPMGFA016A	IC,POWER MANAGEMENT	KA78R08TSTU FAIRCHILD 4P TO-22	
		IC152	0IPMGFA046A	IC,POWER MANAGEMENT	KA278R33TSTU FAIRCHILD 4PIN TO	
		IC152	0IPMGKE022B	IC,POWER MANAGEMENT	KIA278R33PI-CU KEC 4PIN TO-220	
⚠		L102	616-145P	FILTER(CIRC),DRAWING	LFSQ2215V4-04220B SAMWAH TECOM	
		L122	633-088G	COIL,CHOKE	CHOCK(22MH) 5MM TOKO TP	
		L123	633-088G	COIL,CHOKE	CHOCK(22MH) 5MM TOKO TP	
		L125	633-088D	COIL,CHOKE	CHOCK ,20UH KWANGSUNG LEAD CU	
		Q150	0TR115100AC	TRANSISTOR,BIPOLARS	KTB1151-Y BK KEC TO126 -	
		Q150	0TR115100AA	TRANSISTOR	KSB1151-Y BK SAMSUNG TO-126	
		Q156	0TR320509AB	TRANSISTOR	KTC3205-TP-Y (KTC2236A)KEC	
		Q161	0TR126809BA	TRANSISTOR,BIPOLARS	KTA1268-BL TP KEC	
		Q162	0TR319809AC	TRANSISTOR	KTC3198-TP-BL (KTC1815)KEC	
		Q162	0TR319909AF	TRANSISTOR,BIPOLARS	KTC3199-BL MINI TP KEC	
		Q162	0TR534309BA	TRANSISTOR	2SC5343-L TP AUK TO92	
		R100	0RD1504H632	RESISTOR,FIXED CARBON FILM	1.5M OHM 1/2 W 5.00% MF10	
		R101	614-007A	RESISTOR	2.7/2W CEMENT SMPS V	
		R104	0RS5602K619	RESISTOR,FIXED METAL OXIDE FIL	56K OHM 2 W 5.00% TR	
		R105	0RD0222F608	RESISTOR,FIXED CARBON FILM	22 OHM 1/6 W 5% TA26	
		R106	0RD0222F608	RESISTOR,FIXED CARBON FILM	22 OHM 1/6 W 5% TA26	
		R107	0RS0350K619	RESISTOR,FIXED METAL OXIDE FIL	0.35 OHM 2 W 5.00% TR	
		R112	0RD2200F608	RESISTOR,FIXED CARBON FILM	220 OHM 1/6 W 5% TA26	
		R113	0RD2201F608	RESISTOR,FIXED CARBON FILM	2.2K OHM 1/6 W 5% TA26	
		R114	0RD1001F608	RESISTOR,FIXED CARBON FILM	1K OHM 1/6 W 5% TA26	
		R115	0RN3301F408	RESISTOR,FIXED METAL FILM	3.3K OHM 1/6 W 1% TA26	
		R116	0RN2701F408	RESISTOR,FIXED METAL FILM	2.7K OHM 1/6 W 1% TA26	
		R117	0RD2700F608	RESISTOR,FIXED CARBON FILM	270 OHM 1/6 W 5% TA26	
		R119	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K OHM 1/6 W 5% TA26	
		R131	0RD2203F608	RESISTOR,FIXED CARBON FILM	220K OHM 1/6 W 5% TA26	
		R132	0RD2203F608	RESISTOR,FIXED CARBON FILM	220K OHM 1/6 W 5% TA26	
		R153	0RD4701F608	RESISTOR,FIXED CARBON FILM	4.7K OHM 1/6 W 5% TA26	

S	AL	LOCA. NO.	LG PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		R154	0RD1001F608	RESISTOR,FIXED CARBON FILM	1K OHM 1/6 W 5% TA26	
		R155	0RD1802F608	RESISTOR,FIXED CARBON FILM	18K OHM 1/6 W 5% TA26	
		R156	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K OHM 1/6 W 5% TA26	
		R157	0RD1001F608	RESISTOR,FIXED CARBON FILM	1K OHM 1/6 W 5% TA26	
		R158	0RD3300F608	RESISTOR,FIXED CARBON FILM	330 OHM 1/6 W 5% TA26	
		R159	0RD3300F608	RESISTOR,FIXED CARBON FILM	330 OHM 1/6 W 5% TA26	
		R163	0RD4701F608	RESISTOR,FIXED CARBON FILM	4.7K OHM 1/6 W 5% TA26	
		R164	0RD4701F608	RESISTOR,FIXED CARBON FILM	4.7K OHM 1/6 W 5% TA26	
		R170	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K OHM 1/6 W 5% TA26	
		R171	0RD1001F608	RESISTOR,FIXED CARBON FILM	1K OHM 1/6 W 5% TA26	
⚠		T101	6170RNGW12A	TRANSFORMER,SMPS[COIL]	EER3530 SOOJUNG WIDE EER3530	
⚠		V101	656-004C	VARISTOR,DRAWING	SVC681D-10A SAMHWA 4.O CUT	
		ZD103	0DZ132609AB	DIODE,ZENER	GDZJ13A 26MM TP GRANDE DO34 0	
		***	DECK ASSEMBLY(VCR)	***		
		A00	6721RF0740D	DECK ASSEMBLY,VIDEO	DECK/MECHA D35(N) DI(4HF, NTSC	NSP
		A01	6723R-0403A	DRUM(CIRC) ASSEMBLY	D35-6CH NTSC (8C6W)	
		A04	4811RF0038A	BRACKET ASSEMBLY	L/D(S)	
		A04	4811RF0038B	BRACKET ASSEMBLY	L/D(M) - DI	
		A11	4471R-0005A	GEAR ASSY	P3	
		A12	4471R-0004A	GEAR ASSY	P2	
		A21	4931R-0047A	HOLDER ASSY	CST	
		A22	4471R-0006A	GEAR ASSY	RACK F/L	
		A23	4261R-0023A	ARM ASSY	F/L	
		A24	4510R-0046A	LEVER	ASSY SWITCH	
		001	6723R-0306A	DRUM(CIRC) ASSEMBLY	SUB D35-6CH (8C6W)	NSP
		002	4680R-B008A	MOTOR(MECH)	DRUM VH4302-800 SANYO FOR D35K	
		002	4680R-B010A	MOTOR(MECH)	DRUM MDVC-035KA LGIT FOR D35K	
		002	4680R-B009A	MOTOR(MECH)	DRUM I2OAL21 SANKYO FOR D35K	
		002	4680R-B005A	MOTOR(MECH)	DRUM I2OAL05 SEJIN-SANKYO ICLE	
		002	4680R-B003B	MOTOR(MECH)	DRUM VH4301 KUMAGAYA DRUM MOTO	
		002	4680R-B007A	MOTOR(MECH)	DRUM MDVC-035AA LGIT FOR D-35,	
		002A	5202R00002C	BRUSH,CARBON	ASSY D33 (TIP+2 SPRING) 1.4,	
		003	4930R-0284A	HOLDER	FPC(6CH)	
		004	5006R-0034A	CAP	FPC	
		008	6850R-HG18Z	CABLE,FLAT	P=1.25 FFC UL2896(0.05X0.8) 7	
		009	4260R-0038A	ARM	T/UP(D35)	
		011	4261R-0022A	ARM ASSY	TENSION(D35)	
		012	3041R-0037A	BASE ASSY	P2	
		013	3041R-0038A	BASE ASSY	P3	
		014	3041R-0039A	BASE ASSY	P4	
		015	5870R-0005A	OPENER	LID(D35)	
		016	3041R-0036B	BASE ASSEMBLY	A/C HEAD (TDK)	
		016	3041R-0036A	BASE ASSEMBLY	A/C HEAD (ALPS)	
		017	4408R-0003A	REEL	S	
		018	4970R-0140A	SPRING	COIL RS D35	
		018	4970R-0121A	SPRING	COIL D35	
		019	4421R-0008A	BRAKE ASSEMBLY	RS	
		020	4970R-0128A	SPRING	COIL D35 (TB)	
		021	4421R-0006A	BRAKE ASSY	T	
		022	6520D00001A	HEAD(CIRC)	D35 FE TDK FE HEAD	
		022	6520D00002A	HEAD(CIRC)	D35 FE ST FE HEAD	
		022	6520C00002A	HEAD(CIRC)	D35 ACE ALPS AUDIO CTL ERASE	
		023	3040R-0057A	BASE	LOADING	
		024	4261R-0029A	ARM ASSEMBLY	IDLER (N)	
		025	4810R-0118A	BRACKET	L/D(S)	NSP
		026	4680R-D002A	MOTOR(MECH)	LOADING MDB2B66 SANKYO D35 ASP	NSP
		027	4470R-0093A	GEAR	DECK/MECHA WHEEL OTHER	NSP
		028	4408R-0004A	REEL	T	

S	AL	LOCA. NO.	LG PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		029	4261R-0019C	ARM ASSEMBLY	DECK/MECHA PINCH	
		029	4261R-0019B	ARM ASSEMBLY	PINCH	
		029	4261R-0019A	ARM ASSEMBLY	DECK/MECHA PINCH	
		029	4261R-0019D	ARM ASSEMBLY	DECK/MECHA PINCH	
		030	4510R-0043A	LEVER	T/UP	
		031	4970R-0123A	SPRING	COIL TENSION(D35)	
		032	3141R-0040A	CHASSIS ASSEMBLY	D35	NSP
		051	4400R-0005A	BELT	CAPSTAN	
		052	4680R-A009A	MOTOR(MECH)	CAPSTAN X120 DMVCMC10L FOR D35	
		052	4680R-A011A	MOTOR(MECH)	CAPSTAN MCVC-35KA LGIT FOR X12	
		052	4680R-A010A	MOTOR(MECH)	CAPSTAN F2QVB36 SANKYO FOR X12	
		052	4680R-A006A	MOTOR(MECH)	CAPSTAN MCVC-035AA LGIT BLDC 3	
		052	4680R-A008A	MOTOR(MECH)	CAPSTAN SAMSUNG DMVCMC09L D35	
		052	4680R-A007A	MOTOR(MECH)	CAPSTAN F2QVB06 SANKYO D35 ASR	
		052A	4980R-0023A	SUPPORTER	CAPSTAN(D35)	
		054	4470R-0100A	GEAR	RACK F/L	
		054A	4970R-0124B	SPRING	COIL D35 (RACK F/L)	
		055	4470R-0097A	GEAR	DRIVE(D35)	
		056	4470R-0096A	GEAR	CAM(D35)	
		058	4421R-0007A	BRAKE ASSY	CAPSTAN	
		060	4510R-0040A	LEVER	F/R(D35)	
		061	4265R-0006A	CLUTCH ASSEMBLY	D35 (N)	
		064	4470R-0098A	GEAR	SECTOR(D35)	
		065	4261R-0021A	ARM ASSY	P3	NSP
		066	4970R-0122A	SPRING	COIL D35	NSP
		067	4470R-0095A	GEAR	P3	NSP
		068	4470R-0094A	GEAR	P2	NSP
		069	4970R-0122A	SPRING	COIL D35	NSP
		070	4261R-0020A	ARM ASSY	P2	NSP
		076	4510R-0047A	LEVER	SPRING	
		077	3300R-M116A	PLATE	SLIDER	
		078	4510R-0041A	LEVER	TENSION	
		079	3040R-0056A	BASE	TENSION(D35)	
		100	3301R-M022A	PLATE ASSEMBLY	TOP	
		100A	3300R-0184A	PLATE	GND	
		100B	3300R-M118A	PLATE	TOP(D35)	
		102	4970R-0130A	SPRING	COIL D35 (STOPPER)	
		103	4930R-0276A	HOLDER	SIDE(L)	NSP
		105	4930R-0274A	HOLDER	CST	NSP
		106	4930R-0275A	HOLDER	SIDE(R)	NSP
		107	4510R-0044A	LEVER	STOPPER	NSP
		109	5870R-0004A	OPENER	DOOR	
		110	4260R-0035A	ARM	F/L(L)	NSP
		112	3070R-0002A	BODY	F/L	NSP
		113	4970R-0127A	SPRING	COIL D35 (F/L(R))	NSP
		114	4260R-0036A	ARM	F/L(R)	NSP
		115	4510R-0042A	LEVER	SWITCH	
		116	4970R-0138A	SPRING	COIL D35 SWITCH	
		117	3300R-M137A	PLATE	SPRING CST	
		401	1MEC0261518	SCREW MACHINE,PAN HEAD SPR W	D2.6 L4.5 MSWR3/FZY	
		402	1MPC0261418	SCREW MACHINE,PAN HEAD	D 2.6 L 4.0 MSWR3/FZY	
		405	1SZZR-0031B	SCREW,DRAWING	+1 D2.6 L5.8 SWRCH16A/FZY TAP	
		406	1MEC0302018	PAN HEAD MACHINE SCREW S/W +	D 3.0 L 6.0 MSWR3/FZY	
		409	1SZZR-0032B	SCREW,DRAWING	+1 D2.6 L5.0 SWRCH18A/FZY TAP	
		410	1APF0262218	SCREW TAP TITE(B),PAN HEAD	D2.6 L6.8 MSWR3/FZY	
		517	1WZZR-0004D	WASHER	STOPPER	
		518	1WZZR-0004A	WASHER	STOPPER	

S	AL	LOCA. NO.	LG PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		*** SUB PWB(PCB) ASSEMBLY(DVD) ***				
		A46A	6885R-2202C	SUB PWB(PCB) ASSEMBLY	55530045140560 000000C0 081810	
		C201	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C202	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C203	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C206	0CE1074F638	CAPACITOR,ELECTROLYTIC	100U SRA 16V M FM5 TP(5)	
		C207	0CE4764F638	CAPACITOR,ELECTROLYTIC	47M SRA/SS 16V M FM5 TP(5)	
		C208	0CE4764F638	CAPACITOR,ELECTROLYTIC	47M SRA/SS 16V M FM5 TP(5)	
		C211	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C212	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C213	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C214	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C231	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C232	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C233	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C234	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C239	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C240	0CH1153K562	CAPACITOR,FIXED CERAMIC(Temp.c	0.015UF 50V 10% X7R(X) 1608 R/	
		C241	0CE4764F638	CAPACITOR,ELECTROLYTIC	47M SRA/SS 16V M FM5 TP(5)	
		C243	0CH4561K412	CAPACITOR,FIXED CERAMIC(High d	560PF 50V 5% NP0 1608 R/TP	
		C244	0CH4561K412	CAPACITOR,FIXED CERAMIC(High d	560PF 50V 5% NP0 1608 R/TP	
		C245	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C251	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C252	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C253	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C254	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C255	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C257	0CH1105D942	CAPACITOR,CHIP[CERAMIC M/L HD	1UF 10V Z Y5V(F) 1508 R/TP	
		C258	0CH1105D942	CAPACITOR,CHIP[CERAMIC M/L HD	1UF 10V Z Y5V(F) 1508 R/TP	
		C259	0CH1105D942	CAPACITOR,CHIP[CERAMIC M/L HD	1UF 10V Z Y5V(F) 1508 R/TP	
		C260	0CH1105D942	CAPACITOR,CHIP[CERAMIC M/L HD	1UF 10V Z Y5V(F) 1508 R/TP	
		C261	0CH1105D942	CAPACITOR,CHIP[CERAMIC M/L HD	1UF 10V Z Y5V(F) 1508 R/TP	
		C262	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C263	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C264	0CH1153K562	CAPACITOR,FIXED CERAMIC(Temp.c	0.015UF 50V 10% X7R(X) 1608 R/	
		C265	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C266	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C267	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C268	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C269	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C270	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C271	0CH4391K412	CAPACITOR,CHIP[CERAMIC M/L TC	390PF 50V J NP0 1508 R/TP	
		C272	0CH4391K412	CAPACITOR,CHIP[CERAMIC M/L TC	390PF 50V J NP0 1508 R/TP	
		C273	0CH1333K562	CAPACITOR,CHIP[CERAMIC M/L HD	0.033UF 50V K X7R(X) 1508 R/TP	
		C274	0CH4471K412	CAPACITOR,CHIP[CERAMIC M/L TC	470PF 50V J NP0 1508 R/TP	
		C276	0CH4100K112	CHIP CAPA CERAMIC M/L T.C F/S	10P 50V D COG 1.6X0.8 R/TP	
		C277	0CH1153K562	CAPACITOR,FIXED CERAMIC(Temp.c	0.015UF 50V 10% X7R(X) 1608 R/	
		C278	0CH4270K412	CAPACITOR,CHIP[CERAMIC M/L TC	27PF 50V J NP0 1608 R/TP	
		C279	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C280	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C281	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C282	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C283	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C291	0CE1074F638	CAPACITOR,ELECTROLYTIC	100U SRA 16V M FM5 TP(5)	
		C292	0CE4764F638	CAPACITOR,ELECTROLYTIC	47M SRA/SS 16V M FM5 TP(5)	
		C293	0CE4764F638	CAPACITOR,ELECTROLYTIC	47M SRA/SS 16V M FM5 TP(5)	
		C295	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C296	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	

S	AL	LOCA. NO.	LG PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		C297	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C298	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C401	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C402	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C403	0CH1105D942	CAPACITOR,CHIP[CERAMIC M/L HD	1UF 10V Z Y5V(F) 1508 R/TP	
		C404	0CH1105D942	CAPACITOR,CHIP[CERAMIC M/L HD	1UF 10V Z Y5V(F) 1508 R/TP	
		C405	0CE4764F638	CAPACITOR,ELECTROLYTIC	47M SRA/SS 16V M FM5 TP(5)	
		C406	0CE1074F638	CAPACITOR,ELECTROLYTIC	100U SRA 16V M FM5 TP(5)	
		C407	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C408	0CE2264F638	CAPACITOR,ELECTROLYTIC	22M SRA 16V M FM5 TP(5)	
		C409	0CE2264F638	CAPACITOR,ELECTROLYTIC	22M SRA 16V M FM5 TP(5)	
		C410	0CE2264F638	CAPACITOR,ELECTROLYTIC	22M SRA 16V M FM5 TP(5)	
		C411	0CE2264F638	CAPACITOR,ELECTROLYTIC	22M SRA 16V M FM5 TP(5)	
		C412	0CE1074F638	CAPACITOR,ELECTROLYTIC	100U SRA 16V M FM5 TP(5)	
		C413	0CH1102K562	CAPACITOR,FIXED CERAMIC(Temp.c	1000PF 50V 10% X7R(X) 1608 R/T	
		C414	0CH1102K562	CAPACITOR,FIXED CERAMIC(Temp.c	1000PF 50V 10% X7R(X) 1608 R/T	
		C415	0CH4271K412	CAPACITOR,FIXED CERAMIC(HIGH D	270PF 50V 5% NP0 1608 R/TP	
		C416	0CH4271K412	CAPACITOR,FIXED CERAMIC(HIGH D	270PF 50V 5% NP0 1608 R/TP	
		C417	0CH4271K412	CAPACITOR,FIXED CERAMIC(HIGH D	270PF 50V 5% NP0 1608 R/TP	
		C418	0CH4271K412	CAPACITOR,FIXED CERAMIC(HIGH D	270PF 50V 5% NP0 1608 R/TP	
		C419	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C420	0CE1074F638	CAPACITOR,ELECTROLYTIC	100U SRA 16V M FM5 TP(5)	
		C421	0CH1392K562	CAPACITOR,FIXED CERAMIC(Temp.c	3900PF 50V K Z5U(E) 1608 R/TP	
		C422	0CH1392K562	CAPACITOR,FIXED CERAMIC(Temp.c	3900PF 50V K Z5U(E) 1608 R/TP	
		C423	0CE2264F638	CAPACITOR,ELECTROLYTIC	22M SRA 16V M FM5 TP(5)	
		C424	0CE2264F638	CAPACITOR,ELECTROLYTIC	22M SRA 16V M FM5 TP(5)	
		C425	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C426	0CE2274C638	CAPACITOR,ELECTROLYTIC	220M SRA 6.3V M FM5 TP(5)	
		C502	0CH1103K562	CAPACITOR,FIXED CERAMIC(Temp.c	0.01UF 50V 10% X7R(X) 1608 R/T	
		C503	0CH1103K562	CAPACITOR,FIXED CERAMIC(Temp.c	0.01UF 50V 10% X7R(X) 1608 R/T	
		C504	0CH1103K562	CAPACITOR,FIXED CERAMIC(Temp.c	0.01UF 50V 10% X7R(X) 1608 R/T	
		C505	0CH1103K562	CAPACITOR,FIXED CERAMIC(Temp.c	0.01UF 50V 10% X7R(X) 1608 R/T	
		C506	0CH4101K412	CHIP CAPA CERAMIC M/L T.C F/S	100P 50V J COG 1.6X0.8 R/TP	
		C507	0CH1103K562	CAPACITOR,FIXED CERAMIC(Temp.c	0.01UF 50V 10% X7R(X) 1608 R/T	
		C508	0CH1225F944	CAPACITOR,FIXED CERAMIC(Temp.c	2.2UF 16V 80%,-20% Y5V(F) 3216	
		C509	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C510	0CH4101K412	CHIP CAPA CERAMIC M/L T.C F/S	100P 50V J COG 1.6X0.8 R/TP	
		C511	0CE4764F638	CAPACITOR,ELECTROLYTIC	47M SRA/SS 16V M FM5 TP(5)	
		C513	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C514	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C515	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C516	0CH1225F944	CAPACITOR,FIXED CERAMIC(Temp.c	2.2UF 16V 80%,-20% Y5V(F) 3216	
		C517	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C518	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C519	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C520	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C521	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C522	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C523	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C524	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C525	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C526	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C527	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C528	0CE4764F638	CAPACITOR,ELECTROLYTIC	47M SRA/SS 16V M FM5 TP(5)	
		C530	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C531	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C532	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C533	0CH4180K412	CAPACITOR,CHIP[CERAMIC M/L TC	18P 50V J COG 1.6X0.8 R/TP	

S	AL	LOCA. NO.	LG PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		C534	0CH4330K412	CAPACITOR,CHIP[CERAMIC M/L TC	33P 50V J COG 1.6X0.8 R/TP	
		C535	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C536	0CH1102K562	CAPACITOR,FIXED CERAMIC(Temp.c	1000PF 50V 10% X7R(X) 1608 R/T	
		C537	0CH1102K562	CAPACITOR,FIXED CERAMIC(Temp.c	1000PF 50V 10% X7R(X) 1608 R/T	
		C538	0CH1102K562	CAPACITOR,FIXED CERAMIC(Temp.c	1000PF 50V 10% X7R(X) 1608 R/T	
		C539	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C540	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C541	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C542	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C543	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C544	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C545	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C554	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C555	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C556	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C557	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C558	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C559	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C560	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C561	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C563	0CE2274C638	CAPACITOR,ELECTROLYTIC	220M SRA 6.3V M FM5 TP(5)	
		C564	0CE2274C638	CAPACITOR,ELECTROLYTIC	220M SRA 6.3V M FM5 TP(5)	
		C567	0CH4221K412	CAPACITOR,CHIP[CERAMIC M/L TC	220P 50V J COG 1.6X0.8 R/TP	
		C568	0CH4221K412	CAPACITOR,CHIP[CERAMIC M/L TC	220P 50V J COG 1.6X0.8 R/TP	
		C569	0CH4221K412	CAPACITOR,CHIP[CERAMIC M/L TC	220P 50V J COG 1.6X0.8 R/TP	
		C575	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C576	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C577	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C578	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C579	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C580	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C581	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C582	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C583	0CE2274C638	CAPACITOR,ELECTROLYTIC	220M SRA 6.3V M FM5 TP(5)	
		C584	0CH4270K412	CAPACITOR,CHIP[CERAMIC M/L TC	27PF 50V J NP0 1608 R/TP	
		C585	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C586	0CH4101K412	CHIP CAPA CERAMIC M/L T.C F/S	100P 50V J COG 1.6X0.8 R/TP	
		C587	0CH4101K412	CHIP CAPA CERAMIC M/L T.C F/S	100P 50V J COG 1.6X0.8 R/TP	
		C589	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C590	0CE2274C638	CAPACITOR,ELECTROLYTIC	220M SRA 6.3V M FM5 TP(5)	
		C591	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C592	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C597	0CH4470K412	CAPA,CHIP CERAMIC M/L T.C F/S	47P 50V J COG 1.6X0.8 R/TP	
		C5A1	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C5A2	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C5C1	0CE4764F638	CAPACITOR,ELECTROLYTIC	47M SRA/SS 16V M FM5 TP(5)	
		C5C2	0CE1054K638	CAPACITOR,ELECTROLYTIC	1.0M SRA/SS50V M FM5 TP(5)	
		C5C4	0CE1054K638	CAPACITOR,ELECTROLYTIC	1.0M SRA/SS50V M FM5 TP(5)	
		C5C5	0CE1054K638	CAPACITOR,ELECTROLYTIC	1.0M SRA/SS50V M FM5 TP(5)	
		C5C6	0CE1054K638	CAPACITOR,ELECTROLYTIC	1.0M SRA/SS50V M FM5 TP(5)	
		C5C7	0CE1054K638	CAPACITOR,ELECTROLYTIC	1.0M SRA/SS50V M FM5 TP(5)	
		C5C8	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C5C9	0CE2264F638	CAPACITOR,ELECTROLYTIC	22M SRA 16V M FM5 TP(5)	
		C5E0	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C601	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C602	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C603	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C604	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	

S	AL	LOCA. NO.	LG PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		C605	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C606	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		D401	0DSRM00118A	DIODE,SWITCHING	DAP202K T146 ROHM R/TP SMD 80V	
		D601	0DR104009BA	DIODE,RECTIFIER	RL104F TP RECTRON NON 400V 1A	
		F501	6200JB8010V	FILTER(CIRC),EMC	LFA20-2A1E473MT MITSUBISHI MAT	
		IC201	0ILNRNF006A	IC,LINEAR	MT1336E MEDIATEK INCORPORATION	
		IC202	0IPRPSA010A	IC,PERIPHERALS	LA6560-A-TE-L SANYO HSOP-36R R	
		IC401	0IPRPCI003B	IC,PERIPHERALS	CS4391-KZR CIRRUS LOGIC 20 TSS	
		IC402	0IJR458000B	IC,JRC	NJM4580M 8,DMP8 TP OP AMP 2K/R	
		IC501	0ILNRNF007A	IC,LINEAR	MT1379DE MEDIATEK INCORPORATIO	
		IC502	0IEB121616B	IC,ELITE MEMORY TECHNOLOGY	M12L16161A-7T-L 50PIN TSOP TRA	
		IC502	0IMMREB006A	IC,MEMORIES	M12L16161A-7T-TI ELITE MEMORY	
		IC503	0IEB121616B	IC,ELITE MEMORY TECHNOLOGY	M12L16161A-7T-L 50PIN TSOP TRA	
		IC503	0IMMREB006A	IC,MEMORIES	M12L16161A-7T-TI ELITE MEMORY	
		IC505	0ISS240210A	IC,SAMSUNG ELECTRONICS	S524A40X21-SCT0 SOP8 TP EEPROM	
		IC510	0IFA742440F	IC,FAIRCHILD	MM74HCT244SJ 20P SOIC TP 3-STA	
		IC5A1	0IMMRBA001A	IC,MEMORIES	A29L800TV-70 AMIC TECHNOLOGY 4	
		IC5A1	0IMMRFU010A	IC,MEMORIES	MBM29LV800TA-70PFTN FUJITSU 48	
		IC5A1A	6957R-254AS	PROGRAM	VC643MK HA1UZZ MTK PROG	
		IC5C1	0IPRPMT008A	IC,PERIPHERALS	MM1623XFBE MITSUMI 28PIN SOP R	
		L201	0LR0102J025	INDUCTOR,RADIAL LEAD	10UH 5% 4X5 TR5	
		L202	6200HJC102A	FILTER(CIRC),EMC	HB-1M2012-102JT CERATECH TP	
		L203	0LR0102J025	INDUCTOR,RADIAL LEAD	10UH 5% 4X5 TR5	
		L204	6200HJC102A	FILTER(CIRC),EMC	HB-1M2012-102JT CERATECH TP	
		L231	6200HJC102A	FILTER(CIRC),EMC	HB-1M2012-102JT CERATECH TP	
		L251	6200HJC102A	FILTER(CIRC),EMC	HB-1M2012-102JT CERATECH TP	
		L261	6200HJC102A	FILTER(CIRC),EMC	HB-1M2012-102JT CERATECH TP	
		L262	6200HJC102A	FILTER(CIRC),EMC	HB-1M2012-102JT CERATECH TP	
		L264	6200HJC102A	FILTER(CIRC),EMC	HB-1M2012-102JT CERATECH TP	
		L265	6200HJC102A	FILTER(CIRC),EMC	HB-1M2012-102JT CERATECH TP	
		L401	6200HJC102A	FILTER(CIRC),EMC	HB-1M2012-102JT CERATECH TP	
		L402	6200HJC102A	FILTER(CIRC),EMC	HB-1M2012-102JT CERATECH TP	
		L403	6200HJC102A	FILTER(CIRC),EMC	HB-1M2012-102JT CERATECH TP	
		L501	6200HJC102A	FILTER(CIRC),EMC	HB-1M2012-102JT CERATECH TP	
		L502	6200HJC102A	FILTER(CIRC),EMC	HB-1M2012-102JT CERATECH TP	
		L503	6200HJC102A	FILTER(CIRC),EMC	HB-1M2012-102JT CERATECH TP	
		L504	6200HJC102A	FILTER(CIRC),EMC	HB-1M2012-102JT CERATECH TP	
		L505	6200HJC102A	FILTER(CIRC),EMC	HB-1M2012-102JT CERATECH TP	
		L506	6200HJC102A	FILTER(CIRC),EMC	HB-1M2012-102JT CERATECH TP	
		L507	6200HJC102A	FILTER(CIRC),EMC	HB-1M2012-102JT CERATECH TP	
		L508	6200HJC102A	FILTER(CIRC),EMC	HB-1M2012-102JT CERATECH TP	
		L5C1	6200HJC102A	FILTER(CIRC),EMC	HB-1M2012-102JT CERATECH TP	
		L601	6200HJC102A	FILTER(CIRC),EMC	HB-1M2012-102JT CERATECH TP	
		L602	6200HJC102A	FILTER(CIRC),EMC	HB-1M2012-102JT CERATECH TP	
		L613	6200HJC102A	FILTER(CIRC),EMC	HB-1M2012-102JT CERATECH TP	
		Q201	0TR387509AC	TRANSISTOR	CHIP KTC3875S-GR-T1(ALG) KEC	
		Q202	0TRRH80042A	TRANSISTOR,BIPOLARS	2SK3018 T106 ROHM KOREA R/TP U	
		Q203	0TRRH80042A	TRANSISTOR,BIPOLARS	2SK3018 T106 ROHM KOREA R/TP U	
		Q204	0TR150409AC	TRANSISTOR	KTA1504-GR-T1(ASG) CHIP KEC	
		Q205	0TR150409AC	TRANSISTOR	KTA1504-GR-T1(ASG) CHIP KEC	
		Q401	0TR150409AC	TRANSISTOR	KTA1504-GR-T1(ASG) CHIP KEC	
		Q404	0TR103009AC	TRANSISTOR	KRA103S-T1(PC)22-22 CHIP KEC	
		Q405	0TR103009AC	TRANSISTOR	KRA103S-T1(PC)22-22 CHIP KEC	
		Q501	0TR387509AC	TRANSISTOR	CHIP KTC3875S-GR-T1(ALG) KEC	
		R201	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R202	0RH1003C622	RESISTOR,METAL GLAZED(CHIP)	100K OHM 1 / 16 W 1608 5.00% D	
		R203	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R204	0RH1003C622	RESISTOR,METAL GLAZED(CHIP)	100K OHM 1 / 16 W 1608 5.00% D	

S	AL	LOCA. NO.	LG PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		R205	0RH0272C622	RESISTOR,METAL GLAZED(CHIP)	27 OHM 1 / 16 W 1608 5.00% D	
		R206	0RH0272C622	RESISTOR,METAL GLAZED(CHIP)	27 OHM 1 / 16 W 1608 5.00% D	
		R207	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R208	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R209	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R210	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R211	0RH0221C622	RESISTOR,METAL GLAZED(CHIP)	2.2 OHM 1 / 16 W 1608 5.00% D	
		R212	0RJ7503C677	RESISTOR,METAL GLAZED(CHIP)	750K OHM 1/16 W 5% 1608 R/TP	
		R213	0RH3903C622	RESISTOR,METAL GLAZED(CHIP)	390K OHM 1 / 16 W 1608 5.00% D	
		R214	0RJ7503C677	RESISTOR,METAL GLAZED(CHIP)	750K OHM 1/16 W 5% 1608 R/TP	
		R215	0RH3903C622	RESISTOR,METAL GLAZED(CHIP)	390K OHM 1 / 16 W 1608 5.00% D	
		R216	0RH0101C622	RESISTOR,METAL GLAZED(CHIP)	1 OHM 1 / 16 W 1608 5.00% D	
		R217	0RH0221C622	RESISTOR,METAL GLAZED(CHIP)	2.2 OHM 1 / 16 W 1608 5.00% D	
		R218	0RH0221C622	RESISTOR,METAL GLAZED(CHIP)	2.2 OHM 1 / 16 W 1608 5.00% D	
		R220	0RH0272C622	RESISTOR,METAL GLAZED(CHIP)	27 OHM 1 / 16 W 1608 5.00% D	
		R221	0RH0272C622	RESISTOR,METAL GLAZED(CHIP)	27 OHM 1 / 16 W 1608 5.00% D	
		R231	0RH2201C622	RESISTOR,METAL GLAZED(CHIP)	2.2K OHM 1 / 16 W 1608 5.00% D	
		R232	0RH2201C622	RESISTOR,METAL GLAZED(CHIP)	2.2K OHM 1 / 16 W 1608 5.00% D	
		R233	0RH0221C622	RESISTOR,METAL GLAZED(CHIP)	2.2 OHM 1 / 16 W 1608 5.00% D	
		R234	0RH0221C622	RESISTOR,METAL GLAZED(CHIP)	2.2 OHM 1 / 16 W 1608 5.00% D	
		R235	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R236	0RH1502C622	RESISTOR,METAL GLAZED(CHIP)	15K OHM 1 / 16 W 1608 5.00% D	
		R237	0RH2702C622	RESISTOR,METAL GLAZED(CHIP)	27K OHM 1 / 16 W 1608 5.00% D	
		R238	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R239	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R240	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R241	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R242	0RH2702C622	RESISTOR,METAL GLAZED(CHIP)	27K OHM 1 / 16 W 1608 5.00% D	
		R243	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R244	0RH1502C622	RESISTOR,METAL GLAZED(CHIP)	15K OHM 1 / 16 W 1608 5.00% D	
		R245	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R246	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R251	0RH3302C622	RESISTOR,METAL GLAZED(CHIP)	33K OHM 1 / 16 W 1608 5.00% D	
		R252	0RH1003C622	RESISTOR,METAL GLAZED(CHIP)	100K OHM 1 / 16 W 1608 5.00% D	
		R253	0RH2702C622	RESISTOR,METAL GLAZED(CHIP)	27K OHM 1 / 16 W 1608 5.00% D	
		R254	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R255	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R256	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R257	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R258	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R259	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R401	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R402	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R403	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R404	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R405	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R407	0RH5601C622	RESISTOR,METAL GLAZED(CHIP)	5.6K OHM 1 / 16 W 1608 5.00% D	
		R408	0RH7501C622	RESISTOR,METAL GLAZED(CHIP)	7.5K OHM 1 / 16 W 1608 5.00% D	
		R409	0RH7501C622	RESISTOR,METAL GLAZED(CHIP)	7.5K OHM 1 / 16 W 1608 5.00% D	
		R410	0RH7501C622	RESISTOR,METAL GLAZED(CHIP)	7.5K OHM 1 / 16 W 1608 5.00% D	
		R411	0RH7501C622	RESISTOR,METAL GLAZED(CHIP)	7.5K OHM 1 / 16 W 1608 5.00% D	
		R412	0RH8201C622	RESISTOR,METAL GLAZED(CHIP)	8.2K OHM 1 / 16 W 1608 5.00% D	
		R413	0RH1801C622	RESISTOR,METAL GLAZED(CHIP)	1.8K OHM 1 / 16 W 1608 5.00% D	
		R414	0RH1801C622	RESISTOR,METAL GLAZED(CHIP)	1.8K OHM 1 / 16 W 1608 5.00% D	
		R415	0RH8201C622	RESISTOR,METAL GLAZED(CHIP)	8.2K OHM 1 / 16 W 1608 5.00% D	
		R416	0RH1801C622	RESISTOR,METAL GLAZED(CHIP)	1.8K OHM 1 / 16 W 1608 5.00% D	
		R417	0RH4701C622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 16 W 1608 5.00% D	
		R418	0RH8201C622	RESISTOR,METAL GLAZED(CHIP)	8.2K OHM 1 / 16 W 1608 5.00% D	

S	AL	LOCA. NO.	LG PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		R419	0RH8201C622	RESISTOR,METAL GLAZED(CHIP)	8.2K OHM 1 / 16 W 1608 5.00% D	
		R420	0RH1801C622	RESISTOR,METAL GLAZED(CHIP)	1.8K OHM 1 / 16 W 1608 5.00% D	
		R421	0RH3300C622	RESISTOR,METAL GLAZED(CHIP)	330 OHM 1 / 16 W 1608 5.00% D	
		R422	0RH3300C622	RESISTOR,METAL GLAZED(CHIP)	330 OHM 1 / 16 W 1608 5.00% D	
		R423	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R424	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R425	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R426	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R427	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R501	0RH8201C622	RESISTOR,METAL GLAZED(CHIP)	8.2K OHM 1 / 16 W 1608 5.00% D	
		R502	0RJ7503C677	RESISTOR,METAL GLAZED(CHIP)	750K OHM 1/16 W 5% 1608 R/TP	
		R503	0RH0471C622	RESISTOR,METAL GLAZED(CHIP)	4.7 OHM 1 / 16 W 1608 5.00% D	
		R504	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R505	0RH0471C622	RESISTOR,METAL GLAZED(CHIP)	4.7 OHM 1 / 16 W 1608 5.00% D	
		R506	0RH0471C622	RESISTOR,METAL GLAZED(CHIP)	4.7 OHM 1 / 16 W 1608 5.00% D	
		R507	0RH1501C622	RESISTOR,METAL GLAZED(CHIP)	1.5K OHM 1 / 16 W 1608 5.00% D	
		R508	0RH1003C622	RESISTOR,METAL GLAZED(CHIP)	100K OHM 1 / 16 W 1608 5.00% D	
		R509	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R510	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R511	0RH1802C622	RESISTOR,METAL GLAZED(CHIP)	18K OHM 1 / 16 W 1608 5.00% D	
		R512	0RH1003C622	RESISTOR,METAL GLAZED(CHIP)	100K OHM 1 / 16 W 1608 5.00% D	
		R513	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R515	0RH0332C622	RESISTOR,METAL GLAZED(CHIP)	33 OHM 1 / 16 W 1608 5.00% D	
		R516	0RH0332C622	RESISTOR,METAL GLAZED(CHIP)	33 OHM 1 / 16 W 1608 5.00% D	
		R517	0RH0332C622	RESISTOR,METAL GLAZED(CHIP)	33 OHM 1 / 16 W 1608 5.00% D	
		R518	0RH0332C622	RESISTOR,METAL GLAZED(CHIP)	33 OHM 1 / 16 W 1608 5.00% D	
		R519	0RH0332C622	RESISTOR,METAL GLAZED(CHIP)	33 OHM 1 / 16 W 1608 5.00% D	
		R520	0RH0332C622	RESISTOR,METAL GLAZED(CHIP)	33 OHM 1 / 16 W 1608 5.00% D	
		R521	0RH0332C622	RESISTOR,METAL GLAZED(CHIP)	33 OHM 1 / 16 W 1608 5.00% D	
		R522	0RH0332C622	RESISTOR,METAL GLAZED(CHIP)	33 OHM 1 / 16 W 1608 5.00% D	
		R523	0RH1201C622	RESISTOR,METAL GLAZED(CHIP)	1.2K OHM 1 / 16 W 1608 5.00% D	
		R524	0RH1201C622	RESISTOR,METAL GLAZED(CHIP)	1.2K OHM 1 / 16 W 1608 5.00% D	
		R525	0RH1201C622	RESISTOR,METAL GLAZED(CHIP)	1.2K OHM 1 / 16 W 1608 5.00% D	
		R526	0RH1000C622	RESISTOR,METAL GLAZED(CHIP)	100 OHM 1 / 16 W 1608 5.00% D	
		R527	0RH4701C622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 16 W 1608 5.00% D	
		R528	0RH1201C622	RESISTOR,METAL GLAZED(CHIP)	1.2K OHM 1 / 16 W 1608 5.00% D	
		R529	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R534	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R535	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R564	0RH1802C622	RESISTOR,METAL GLAZED(CHIP)	18K OHM 1 / 16 W 1608 5.00% D	
		R565	0RH1802C622	RESISTOR,METAL GLAZED(CHIP)	18K OHM 1 / 16 W 1608 5.00% D	
		R566	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R567	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R570	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R573	0RH2200C622	RESISTOR,METAL GLAZED(CHIP)	220 OHM 1 / 16 W 1608 5.00% D	
		R574	0RH2200C622	RESISTOR,METAL GLAZED(CHIP)	220 OHM 1 / 16 W 1608 5.00% D	
		R577	0RH4700C622	RESISTOR,METAL GLAZED(CHIP)	470 OHM 1 / 16 W 1608 5.00% D	
		R578	0RH1000C622	RESISTOR,METAL GLAZED(CHIP)	100 OHM 1 / 16 W 1608 5.00% D	
		R579	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R580	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R581	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R584	0RH0222C622	RESISTOR,METAL GLAZED(CHIP)	22 OHM 1 / 16 W 1608 5.00% D	
		R585	0RH1100C622	RESISTOR,METAL GLAZED(CHIP)	110 OHM 1 / 16 W 1608 5.00% D	
		R586	0RH0752C622	RESISTOR,METAL GLAZED(CHIP)	75 OHM 1 / 16 W 1608 5.00% D	
		R587	0RH1100C622	RESISTOR,METAL GLAZED(CHIP)	110 OHM 1 / 16 W 1608 5.00% D	
		R5A7	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R5A9	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R5C1	0RH1500C422	RESISTOR,METAL GLAZED(CHIP)	150 OHM 1 / 16 W 1608 1.00% D	

S	AL	LOCA. NO.	LG PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		R5C3	0RH1500C422	RESISTOR,METAL GLAZED(CHIP)	150 OHM 1 / 16 W 1608 1.00% D	
		R5C4	0RH1500C422	RESISTOR,METAL GLAZED(CHIP)	150 OHM 1 / 16 W 1608 1.00% D	
		R5C5	0RH1500C422	RESISTOR,METAL GLAZED(CHIP)	150 OHM 1 / 16 W 1608 1.00% D	
		R5C6	0RH1500C422	RESISTOR,METAL GLAZED(CHIP)	150 OHM 1 / 16 W 1608 1.00% D	
		R5C9	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R5E1	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R5W1	0RH4701C622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 16 W 1608 5.00% D	
		R601	0RH0752C622	RESISTOR,METAL GLAZED(CHIP)	75 OHM 1 / 16 W 1608 5.00% D	
		R602	0RH0752C622	RESISTOR,METAL GLAZED(CHIP)	75 OHM 1 / 16 W 1608 5.00% D	
		R603	0RH0752C622	RESISTOR,METAL GLAZED(CHIP)	75 OHM 1 / 16 W 1608 5.00% D	
		R604	0RH0752C622	RESISTOR,METAL GLAZED(CHIP)	75 OHM 1 / 16 W 1608 5.00% D	
		R605	0RH0752C622	RESISTOR,METAL GLAZED(CHIP)	75 OHM 1 / 16 W 1608 5.00% D	
		R606	0RH0752C622	RESISTOR,METAL GLAZED(CHIP)	75 OHM 1 / 16 W 1608 5.00% D	
		R607	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R608	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R609	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R610	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R611	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		X501	6202R-BL06C	RESONATOR,CRYSTAL	HC-49/S BUBANG 27MHZ 20PPM 1	
		ZD501	0DZ560009CJ	DIODE,ZENERS	GDZJ5.6B 26MM GRANDE TP26 DO34	